

## **Appendix 2**

### **South Carolina Early Action Compacts**





2600 Bull Street  
Columbia, SC 29201-1708

COMMISSIONER:  
Douglas E. Bryant

December 31, 2002

Facsimile/Overnight

BOARD:  
Bradford W. Wyche  
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Secretary

Howard L. Brilliant, MD

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Rodney L. Grandy

Larry R. Chewning, Jr., DMD

Mr. J. I. Palmer, Jr., Regional Administrator  
USEPA, Region 4  
Sam Nunn Atlanta Federal Center  
61 Forsyth Street, SW  
Atlanta, GA 30303

Re: Additional Submittal of Early Action Compacts for South Carolina Counties

Dear Mr. Palmer:

The South Carolina Department of Health and Environmental Control (DHEC) is moving forward with the development of an early action State Implementation Plan (SIP), as offered by the Environmental Protection Agency (EPA), allowing cleaner air sooner for South Carolina. On November 25, 2002, DHEC completed negotiations with EPA Region 4 staff regarding South Carolina's 8-Hour Ozone Early Action Compacts (EAC).

The EACs were developed to include the local county government, DHEC and the EPA as signatory parties. It should be noted however, that interested stakeholders (i.e., local, state, and federal government, citizens, public interest groups, and the business community) have been and will continue to be involved in the planning process.

Although we have identified the local county government to be a responsible party for participation in the EAC, the counties participating may or may not be part of future boundary determinations and discussions. Specifically, EPA should not consider the counties participating in the EAC as the presumptive boundaries for any future non-attainment designations.

Enclosed are additional South Carolina's 8-Hour Ozone Early Action Compacts signed by me, representing DHEC and the respective county official representing counties in the areas identified on the attached map. These counties should be added to the ones submitted to you on December 20 and 27, 2002. The recent participating counties include the following and are listed by Council of Government (COG) planning areas:

Lower Savannah: Allendale, Bamberg

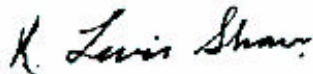
Letter to Mr. Palmer  
December 31, 2002  
Page 2

Should additional EAC's be received after submittal of this correspondence, they will be forwarded to EPA under separate cover.

Having the EAC completed and signed by all parties, including EPA will complete the first "key" milestone as outlined in the November 14, 2002, guidance memorandum issued by Mr. Jeffrey R. Holmstead. We are asking that EPA sign the enclosed EACs no later than December 31, 2002, and return the original for our files. We will then forward a copy to the respective counties.

We appreciate the opportunity to participate in the early action SIP process. Thank you for the assistance and support EPA has provided thus far in this process, especially during the public meetings held in October and in the development of the EAC. We look forward to continuing to work with EPA as we implement measures to achieve cleaner air sooner for South Carolina and our neighboring states. Should you have questions or desire additional information, please do not hesitate to contact me at (803) 896-8940 or Jim Joy, Chief of DHEC's Bureau of Air Quality at (803) 898-4123.

Sincerely,



R. Lewis Shaw, P.E.  
Deputy Commissioner  
Environmental Quality Control

Attachments: 1. Early Action Compacts  
2. Area Map

cc: Kay Prince, EPA Region 4  
Beverly Bannister, EPA Region 4 (no attachments)  
County Officials (no attachments)  
Harold Reheis, GA Dept. of Natural Resources (no attachments)  
Ron Methier, GA Dept. of Natural Resources (no attachments)  
William Ross, NC Dept. of Environmental and Natural Resources (no attachments)  
Keith Overcash, NC Dept. of Environmental and Natural Resources (no attachments)  
EQC District Directors (no attachments)



2600 Bull Street  
Columbia, SC 29201-1708

December 27, 2002

COMMISSIONER:  
C. Earl Hunter

BOARD:  
Bradford W. Wyche  
Chairman

Mark B. Kent  
Vice Chairman

Howard L. Brilliant, MD  
Secretary

Carl L. Brazell

Louisiana W. Wright

L. Michael Blackmon

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Mr. J. I. Palmer, Jr., Regional Administrator  
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Sam Nunn Atlanta Federal Center  
61 Forsyth Street, SW  
Atlanta, GA 30303

Re: Additional Early Action Compacts for South Carolina Counties

Dear Mr. Palmer:

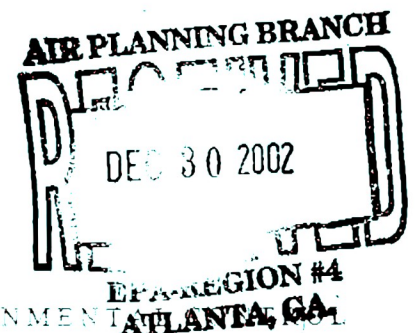
The South Carolina Department of Health and Environmental Control (DHEC) is moving forward with the development of an early action State Implementation Plan (SIP), as offered by the Environmental Protection Agency (EPA), allowing cleaner air sooner for South Carolina. On November 25, 2002, DHEC completed negotiations with EPA Region 4 staff regarding South Carolina's 8-Hour Ozone Early Action Compacts (EAC).

The EACs were developed to include the local county government, DHEC and the EPA as signatory parties. It should be noted however, that interested stakeholders (i.e., local, state, and federal government, citizens, public interest groups, and the business community) have been and will continue to be involved in the planning process.

Although we have identified the local county government to be a responsible party for participation in the EAC, the counties participating may or may not be part of future boundary determinations and discussions. Specifically, EPA should not consider the counties participating in the EAC as the presumptive boundaries for any future non-attainment designations.

Enclosed are additional South Carolina's 8-Hour Ozone Early Action Compacts signed by me, representing DHEC and the respective county official representing counties in the areas identified on the attached map. These counties should be added to the ones submitted to you on December 20, 2002. The recent participating counties include the following and are listed by Council of Government (COG) planning areas:

Waccamaw: Georgetown, Horry  
Santee Lynches: Kershaw  
Berkeley-Charleston-Dorchester: Berkeley, Charleston  
Central Midlands: Fairfield  
Upper Savannah: Greenwood



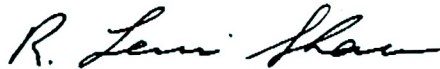
Letter to Mr. Palmer  
December 27, 2002  
Page 2

Should additional EAC's be received after submittal of this correspondence, they will be forwarded to EPA under separate cover. Also attached are several original EACs from the previous submittal. Please sign these and replace the "copy" versions.

Having the EAC completed and signed by all parties, including EPA will complete the first "key" milestone as outlined in the November 14, 2002, guidance memorandum issued by Mr. Jeffrey R. Holmstead. We are asking that EPA sign the enclosed EACs no later than December 31, 2002, and return the original for our files. We will then forward a copy to the respective counties.

We appreciate the opportunity to participate in the early action SIP process. Thank you for the assistance and support EPA has provided thus far in this process, especially during the public meetings held in October and in the development of the EAC. We look forward to continuing to work with EPA as we implement measures to achieve cleaner air sooner for South Carolina and our neighboring states. Should you have questions or desire additional information, please do not hesitate to contact me at (803) 896-8940 or Jim Joy, Chief of DHEC's Bureau of Air Quality at (803) 898-4123.

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R. Lewis Shaw, P.E.  
Deputy Commissioner  
Environmental Quality Control

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Keith Overcash, NC Dept. of Environmental and Natural Resources (no attachments)  
EQC District Directors (no attachments)

# D H E C



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2600 Bull Street  
Columbia, SC 29201-1708

COMMISSIONER:  
C. Earl Hunter

December 20, 2002

BOARD:  
Bradford W. Wyche  
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The EACs were developed to include the local county government, DHEC and the EPA as signatory parties. It should be noted however, that interested stakeholders (i.e., local, state, and federal government, citizens, public interest groups, and the business community) have been and will continue to be involved in the planning process. Enclosed are copies of letters of support received to date from interested stakeholders.

Although we have identified the local county government to be a responsible party for participation in the EAC, the counties participating may or may not be part of future boundary determinations and discussions. Specifically, EPA should not consider the counties participating in the EAC as the presumptive boundaries for any future non-attainment designations.

The Early Action Compact states that the initial modeling emissions inventory and the base case modeling will be completed by December 31, 2002. The completion of these items is addressed in the attached *8-Hour Ozone Modeling Analysis and Attainment Demonstration for South Carolina's Early Action Compact Technical Protocol*.

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December 20, 2002  
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South Carolina maintains responsibility and authority for implementing environmental programs throughout the state, including those in The Catawba Indian Nation, located in York, Lancaster and Chester counties. The Catawba Indian Nation will be included in all planning aspects of the early action SIP through direct communication and their representation on the local Metropolitan Planning Organization. Additionally, DHEC plans to continue to support the efforts of the Central Carolinas Integrated Air Quality Management Pilot Project.

Enclosed are South Carolina's 8-Hour Ozone Early Action Compacts signed by me, representing DHEC and the respective county official representing counties in the areas identified on the attached map. The participating counties to date include the following and are listed by Council of Government (COG) planning areas:

Appalachian: Anderson, Cherokee, Greenville, Oconee, Pickens, Spartanburg  
Catawba: Chester, Lancaster, Union, York  
Pee Dee: Chesterfield, Darlington, Dillon, Florence, Marion, Marlboro  
Waccamaw: Williamsburg  
Santee Lynches: Clarendon, Lee, Sumter  
Berkeley-Charleston-Dorchester: Dorchester  
Low Country: Beaufort, Colleton, Hampton, Jasper  
Lower Savannah: Aiken, Barnwell, Calhoun, Orangeburg  
Central Midlands: Lexington, Newberry, Richland  
Upper Savannah: Abbeville, Edgefield, Laurens, Saluda

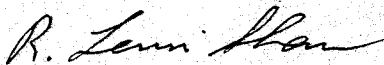
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Letter to Mr. Palmer  
December 20, 2002  
Page 3

We appreciate the opportunity to participate in the early action SIP process. Thank you for the assistance and support EPA has provided thus far in this process, especially during the public meetings held in October and in the development of the EAC. We look forward to continuing to work with EPA as we implement measures to achieve cleaner air sooner for South Carolina and our neighboring states. Should you have questions or desire additional information, please do not hesitate to contact me at (803) 896-8940 or Jim Joy, Chief of DHEC's Bureau of Air Quality at (803) 898-4123.

Sincerely,



R. Lewis Shaw, P.E.  
Deputy Commissioner  
Environmental Quality Control

Attachments: 1. Early Action Compacts  
2. Area Map of South Carolina  
3. Letters of Support  
4. *8-Hour Ozone Modeling Analysis and Attainment Demonstration for South Carolina's Early Action Compact Technical Protocol*

cc: Kay Prince, EPA Region 4  
Beverly Bannister, EPA Region 4 (no attachments)  
County Officials (no attachments)  
Gilbert B. Blue, Chief, Catawba Indian Nation (no attachments)  
Harold Reheis, GA Dept. of Natural Resources (no attachments)  
Ron Methier, GA Dept. of Natural Resources (no attachments)  
William Ross, NC Dept. of Environmental and Natural Resources (no attachments)  
Keith Overcash, NC Dept. of Environmental and Natural Resources (no attachments)  
EQC District Directors (no attachments)

# **Appalachian Area**

## **Local Early Action Compacts**

**December 2002**



**SOUTH CAROLINA'S 8-HOUR OZONE  
EARLY ACTION COMPACT  
Anderson County**

The United States Environmental Protection Agency (EPA) has provided an option for areas currently meeting the 1-hour ozone standard, like those in South Carolina, to attain the 8-hour ozone standard by December 31, 2007, and obtain cleaner air sooner than federally mandated. This option offers a more expeditious time line for achieving emissions reductions than expected under the EPA's 8-hour ozone implementation rulemaking, while providing "fail-safe" provisions for the area to revert to the traditional State Implementation Plan (SIP) process if specific milestones are not met. Through the development of this Early Action Compact (EAC), local, state, and EPA officials agree to work together to develop and implement local and state early action plans. The plans will become a part of the state early action SIP to reduce ground-level ozone concentrations to comply with the 8-hour ozone standard by December 31, 2007, and maintain the standard beyond that date. Failure to meet the obligations outlined in this EAC will result in immediate reversion to the traditional non-attainment designation process as required in the Clean Air Act (CAA).

In an effort to provide this information to areas within South Carolina, the South Carolina Department of Health and Environmental Control (DHEC) held six public meetings throughout the state. The locations of the meetings were targeted to areas that could potentially be designated as non-attainment for the 8-hour ozone standard. The meetings were held in Columbia, Greenville, Florence, Rock Hill, Aiken and Charleston. EPA officials participated in five of the six meetings. The general public, local government representatives, industry representatives, and environmental interest groups attended the meetings. Prior to the meetings, DHEC issued a press release regarding the development of an early action SIP. Correspondence including a fact sheet was sent to all county administrators, Councils of Governments, Metropolitan Planning Organizations, public interest groups, industry representatives, other state agencies and others determined to be stakeholders in the process.

The Parties to this (EAC) are: Anderson County, South Carolina Department of Health and Environmental Control (DHEC) and EPA.

**I. General Provisions**

- A. The parties commit to develop, implement and maintain the early action SIP (which includes the local early action plans) providing EPA defers the effective date of the non-attainment designation and related requirements as long as all conditions of the EAC and key milestones are met.
- B. If the potential area of non-attainment does not meet all the terms of the EAC, then it will forfeit its participation and will be subject to the full planning requirements under applicable CAA

traditional SIP processes including requirements defined as part of the EPA's 8-hour ozone implementation rulemaking.

- C. If the area has had the effective date of a non-attainment designation deferred and the area does not reach attainment of the standard by December 31, 2007, then the non-attainment designation will be effective. If the EPA's implementation schedule also requires a traditional SIP from areas on or before December 31, 2007, then a traditional SIP revision demonstrating attainment by the new attainment date will be due for the non-attainment area no later than December 31, 2008.
- D. Before formal adoption into the early action SIP, this agreement may be modified or terminated by mutual consent of all parties, or any party may withdraw from the agreement by notifying other parties in writing. If a party's withdrawal from the agreement prevents remaining signatories from satisfying any of the terms and milestones of the original agreement, the agreement will be void, any deferred effective date of the non-attainment designation would be withdrawn and the area's non-attainment designation would become effective soon after. Upon termination or withdrawal from the EAC, the area will be subject to the full planning requirements under applicable CAA traditional processes including requirements defined as part of the EPA's 8-hour ozone implementation rulemaking. The local government signatories will approve the local early action plans before submittal to DHEC for inclusion in the early action SIP. Once the local early action plan is incorporated into the early action SIP, any modifications will be treated as SIP revisions.
- E. Execution of this EAC by each Party shall be by signature of each Party's authorized representative. This agreement remains in effect until December 31, 2007.

## II. **Early Action Compact Requirements**

- A. **Milestones and Reporting**  
DHEC and local areas will assess progress towards developing and implementing the early action SIP and make a report available to EPA and the public every six months beginning in June 2003. As per EPA guidance, the key milestones for participation in the EAC are identified in the following table.

<b>Local Plan /Early Action SIP Milestones</b>		
<b>DATE</b>	<b>MILESTONE</b>	<b>RESPONSIBILITY</b>
<b>December 31, 2002</b>	EAC signed by all parties and submitted to EPA	Local/State/EPA
<b>June 16, 2003</b>	Discussion of control measures being considered to EPA	Local/State
<b>March 31, 2004</b>	Final local early action plan submitted to DHEC; copy to EPA	Local
<b>December 31, 2004</b>	Early Action State Implementation Plan submitted to EPA for incorporation into SIP	State
<b>April 1, 2005</b>	Local/State control strategies implemented no later than this date	Local/State
<b>September 30, 2005</b>	EPA takes final action on SIP submitted December 31, 2004	EPA
<b>June 30, 2006</b>	State submits progress report to EPA	State
<b>December 31, 2007</b>	Attainment of the 8-hour ozone standard	Local/State

B. Emissions Inventories

1. DHEC will be responsible for developing emissions inventories.
2. An initial modeling emissions inventory will be completed by December 31, 2002. This inventory includes:
  - a. Emissions modeling data for a 1998 episode that is representative of a typical ozone season exceedance that meets the EPA episode selection guidance;
  - b. MOBILE6 for determining on-road mobile emissions;
  - c. NONROAD model data; and,
  - d. Area source database utilizing population data allocated statewide.
3. A 2007 future year modeling emissions inventory will be developed by March 31, 2004. This inventory will sufficiently account for projected future growth in ozone precursor emissions through 2007, particularly from stationary, non-road and on-road mobile sources.
4. Additional inventories will be contingent upon legislative appropriations or other funding. Selection of specific episode inventories will be partially determined by the conceptual model, which reflects an analysis of meteorological conditions typical of high ozone events.
5. Emissions inventories will be compared and analyzed for trends in emission sources over time. The emissions inventory comparison and analysis will be completed by December 31, 2003.

C. Modeling

1. DHEC will be responsible for conducting the meteorological and air quality modeling analysis. DHEC will conduct the modeling analysis based on the "Draft Guidance on the use of Models and Other Analyses in Attainment Demonstrations for the 8-Hour Ozone NAAQS" (EPA-454/R-99-004, May 1999). The modeling will follow the guidance as facilitated by the EPA Regional Office.
2. Base case modeling will be completed by December 31, 2002. Future case modeling will be completed by October 31, 2003. One or more modeled control cases will be completed by January 31, 2004, with final revisions completed by March 31, 2004. All modeling will:
  - be SIP quality and perform within EPA's accepted margin of accuracy;
  - be carefully documented;
  - sufficiently account for projected future growth in ozone precursor emissions;
  - be accomplished by DHEC and reviewed by EPA; and,
  - be used to determine the effectiveness of NO<sub>x</sub> and/or VOC reductions. The control case(s) will be used to determine the relative effectiveness of different emission reduction strategies and to aid in the selection of appropriate emission reduction strategies.

D. Control Strategies

1. All adopted Federal and State control strategies that have been or will be implemented by the December 31, 2007, attainment date will be included in base, future and control case modeling.
2. Additional local and state control strategies under consideration will be identified by June 16, 2003. The local and state control strategies selected will be implemented as soon as practical, but no later than April 1, 2005.
3. Local and state control strategies will be specific, quantified, permanent and enforceable. The strategies will also include specific implementation dates and detailed documentation and reporting processes.
4. Voluntary strategies can play a supporting role in the local early action plan and the early action SIP. If emission reductions from voluntary strategies are quantified and credit is taken for them in the local early action plan or the early action SIP, those emission reductions will be enforceable. Additional strategies must be implemented to meet those quantified reduction requirements if quantified voluntary strategies fail. This is true for all quantified emission reductions.
5. Local and state control strategies will be designed and implemented with full stakeholder participation.

6. Local and state control strategies will be incorporated by DHEC into the early action SIP. In the event that the local area desires to add, delete or substitute strategies after early action SIP submittal, the local area will request a modification. Local early action plan modifications will be treated as SIP revisions and facilitated by DHEC.

E. Maintenance for Growth

1. The early action SIP will include a component to address emissions growth at least five years beyond December 31, 2007, ensuring that the areas will remain in attainment of the 8-hour ozone standard during that period. Attainment maintenance analysis will be completed by January 31, 2004, with final revisions completed by March 31, 2004. The analysis will employ one or more of the following or any other appropriate techniques necessary to make such a demonstration:
  - a. Modeling analysis showing ozone levels below the 8-hour ozone standard in 2012;
  - b. An annual review of growth (especially mobile and stationary source) to ensure control measures and growth assumptions are adequate;
  - c. Identification and quantification of federal, state, and/or local measures indicating sufficient reductions to offset growth estimates; or,
  - d. Any other appropriate techniques necessary to make such a determination.
2. The early action SIP must also detail a continuing planning process that includes modeling updates and modeling assumption verification (particularly growth assumptions). Modeling updates and planning processes must consider and evaluate the following:
  - a. All relevant actual new point sources;
  - b. Impacts from potential new source growth; and,
  - c. Future transportation patterns and their impact on air quality in a manner that is consistent with the most current adopted Long Range Transportation Plan and most current trend and projections of local motor vehicle emissions.
3. If the review of emissions growth in conjunction with the continuing planning process demonstrates that adopted emission reduction strategies are inadequate to address growth in emissions, additional measures will be added to the early action plan. Local planning processes should prepare for this possibility.
4. In the event that the continuing planning process identifies the need to add, delete, or substitute control strategies after the local early action plan has been incorporated into the early action SIP, the local area will initiate, and DHEC will facilitate a SIP revision to accommodate changes.

**F. Public Involvement**

1. Public involvement has been and will continue to be strongly encouraged during the planning and implementation process.
2. Public awareness programs will be used to provide opportunities for involvement in the planning process, implementation of control strategies, and any other issues important to the area.
3. Interested stakeholders (i.e., local, state, and federal government, citizens, public interest groups, and the business community) will continue to be involved in the planning process as early as possible. Planning meetings will be open to the public, with posted meeting times and locations. Early action SIP drafts will be publicly available, and the drafting process will have sufficient opportunities for comment from all interested stakeholders.
4. Opportunities for public comment on the proposed early action SIP will be provided and will follow the traditional SIP revision process as implemented by DHEC.
5. Semi-annual reports detailing, at a minimum, progress toward key milestones, will be made available to the public.
6. DHEC has established and will maintain a website for South Carolina's Early Action Plan for the 8-hour ozone standard, located at [www.scdhec.net/baq/eap.html](http://www.scdhec.net/baq/eap.html).

**III. Local Government Responsibilities**

The local governments agree to develop and implement a local early action plan that will promote the area's attainment by December 31, 2007, of the 8-hour ozone standard and maintenance until at least 2012. The local governments will develop this plan in coordination with the DHEC, EPA, stakeholders and the public. The local early action plan will include a process to evaluate the effectiveness and maintain long-term compliance with the standard.

After all adopted Federal and State controls that have been or will be implemented by the attainment date of December 31, 2007, are accounted for in the modeling, the local area must adopt additional local controls, as necessary to demonstrate attainment of the 8-hour ozone standard by December 31, 2007. Local controls under consideration must be identified and described by June 16, 2003. These measures must be included in the semi-annual report made available to the public.

The draft local early action plan will be submitted to DHEC by August 31, 2003. The final local early action plan will be submitted to DHEC, with a copy forwarded to EPA, by March 31, 2004. The adopted local early action plan will be included in the early action SIP due December 31, 2004.

In the event a development or issue arises that may impact performance or progress toward key milestones (including if a key milestone will be or has been missed and/or if a termination or modification has been requested), the responsible party will notify all other signatories in writing as soon as possible.

#### **IV. The South Carolina Department of Health and Environmental Control**

DHEC agrees to develop and implement a state early action SIP that will demonstrate the participating area's attainment by December 31, 2007, of the 8-hour ozone standard and maintenance until at least 2012. DHEC will develop this plan in coordination with the local governments, EPA, stakeholders and the public. The state early action SIP will include a process to monitor and maintain long-term compliance with the standard.

It is the responsibility of each state under the CAA to ensure attainment with all National Ambient Air Quality Standards. At any such time that an area is deemed non-attainment, the state will be required to develop a plan to return the area(s) to attainment in accordance with the CAA. If applicable, South Carolina is committed to working with adjacent states to assure mutual attainment of national standards.

In the event a development or issue arises that may impact performance or progress toward key milestones (including if a key milestone will be or has been missed and/or if a termination or modification has been requested), DHEC will notify all other signatories in writing as soon as possible.

DHEC will provide support to areas throughout the planning and implementation process by:

1. Developing emission inventories, modeling, trend analysis, and quantification and comparison of control measures.
2. Providing necessary information on all federal and state adopted emission reduction measures, which affect the area.
3. Providing technical and strategic assistance, as appropriate, in the selection and implementation of control strategies.
4. Providing technical and planning assistance in developing and implementing processes to address the impact of emissions growth beyond the attainment date.
5. Maintaining monitors and reporting and analysis of monitoring data.
6. Promoting public awareness efforts.
7. Coordinating communication between local areas and the EPA to facilitate continuing the EPA review of local work.
8. Ensuring expeditious review of local early action plan(s), and if deemed adequate, proposing modification of the early action SIP to adopt the early action plan.

9. Adopting control measures into the early action SIP as expeditiously as possible. The final complete early action SIP revision must be completed, adopted, and submitted by the state to the EPA by December 31, 2004.
10. Tracking progress. If any milestone is missed and EPA withdraws the deferred effective date, thereby triggering a non-attainment designation and applicable statutory requirements, the state will strive to submit a traditional non-attainment SIP within one year. However, due to the South Carolina legislative review process, it may take at least eighteen months.
11. Working concurrently with areas not electing to participate in the early action SIP process in preparing the traditional SIP submittal as required by the CAA.

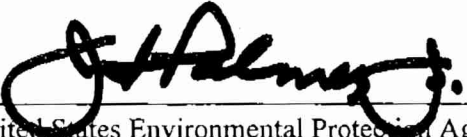
## **V. The Environmental Protection Agency**

The EPA will participate by:

1. Recognizing the local area's and state's commitment to voluntarily adopt an early, substantive, enforceable, and scientifically-based attainment plan with early implementation of control measures by becoming a party to the EAC developed in conformance with South Carolina's Protocol for Early Action Compacts.
2. Providing technical assistance to the state(s) and local area(s) in the development of the early action plan.
3. Reviewing and approving the completed early action SIP by no later than September 30, 2005.
4. Deferring the effective date of non-attainment designation and related requirements for participating areas that fail to meet the 8-hour ozone standard as long as all terms and key milestones of the EAC are being met, including submission of the early action SIP revision by December 31, 2004.
5. Designating the area expeditiously as attainment and imposing no additional requirements, provided that the monitors in the area reflect attainment by December 31, 2007.
6. Taking action to withdraw the deferred effective date if the area violates the standard as of December 31, 2007, and the area has had the effective date of its non-attainment designation deferred. The area's non-attainment designation will become effective soon after.
7. Ensuring appropriate credit in the traditional SIP process for all emissions reductions from measures implemented in the early action SIP if the area does not meet all the terms of the EAC; including meeting agreed-upon key milestones and is designated (or re-designated if necessary) according to the EPA's 8-hour ozone implementation guidelines. The EPA will offer such an area no delays, exemptions, or other favorable treatment because of its participation in the EAC.

8. Not allowing any area to renew their EAC after December 31, 2007, or initiate a new compact if it has previously forfeited its participation.

VI. Signatures

  
United States Environmental Protection Agency

Regional Administrator 12/30/02  
Title Date

R. Lenni Shaw  
South Carolina  
Department of Health and Environmental Control

Deputy Commissioner 12/27/02  
Title Date

Larry E. Allen  
Anderson County Representative

Chairman 12/17/02  
Title Date

**SOUTH CAROLINA'S 8-HOUR OZONE  
EARLY ACTION COMPACT**  
Cherokee County

The United States Environmental Protection Agency (EPA) has provided an option for areas currently meeting the 1-hour ozone standard, like those in South Carolina, to attain the 8-hour ozone standard by December 31, 2007, and obtain cleaner air sooner than federally mandated. This option offers a more expeditious time line for achieving emissions reductions than expected under the EPA's 8-hour ozone implementation rulemaking, while providing "fail-safe" provisions for the area to revert to the traditional State Implementation Plan (SIP) process if specific milestones are not met. Through the development of this Early Action Compact (EAC), local, state, and EPA officials agree to work together to develop and implement local and state early action plans. The plans will become a part of the state early action SIP to reduce ground-level ozone concentrations to comply with the 8-hour ozone standard by December 31, 2007, and maintain the standard beyond that date. Failure to meet the obligations outlined in this EAC will result in immediate reversion to the traditional non-attainment designation process as required in the Clean Air Act (CAA).

In an effort to provide this information to areas within South Carolina, the South Carolina Department of Health and Environmental Control (DHEC) held six public meetings throughout the state. The locations of the meetings were targeted to areas that could potentially be designated as non-attainment for the 8-hour ozone standard. The meetings were held in Columbia, Greenville, Florence, Rock Hill, Aiken and Charleston. EPA officials participated in five of the six meetings. The general public, local government representatives, industry representatives, and environmental interest groups attended the meetings. Prior to the meetings, DHEC issued a press release regarding the development of an early action SIP. Correspondence including a fact sheet was sent to all county administrators, Councils of Governments, Metropolitan Planning Organizations, public interest groups, industry representatives, other state agencies and others determined to be stakeholders in the process.

The Parties to this EAC are: Cherokee County, South Carolina Department of Health and Environmental Control (DHEC) and EPA.

**I. General Provisions**

- A. The parties commit to develop, implement and maintain the early action SIP (which includes the local early action plans) providing EPA defers the effective date of the non-attainment designation and related requirements as long as all conditions of the EAC and key milestones are met.
- B. If the potential area of non-attainment does not meet all the terms of the EAC, then it will forfeit its participation and will be subject to the full planning requirements under applicable CAA

traditional SIP processes including requirements defined as part of the EPA's 8-hour ozone implementation rulemaking.

- C. If the area has had the effective date of a non-attainment designation deferred and the area does not reach attainment of the standard by December 31, 2007, then the non-attainment designation will be effective. If the EPA's implementation schedule also requires a traditional SIP from areas on or before December 31, 2007, then a traditional SIP revision demonstrating attainment by the new attainment date will be due for the non-attainment area no later than December 31, 2008.
- D. Before formal adoption into the early action SIP, this agreement may be modified or terminated by mutual consent of all parties, or any party may withdraw from the agreement by notifying other parties in writing. If a party's withdrawal from the agreement prevents remaining signatories from satisfying any of the terms and milestones of the original agreement, the agreement will be void, any deferred effective date of the non-attainment designation would be withdrawn and the area's non-attainment designation would become effective soon after. Upon termination or withdrawal from the EAC, the area will be subject to the full planning requirements under applicable CAA traditional processes including requirements defined as part of the EPA's 8-hour ozone implementation rulemaking. The local government signatories will approve the local early action plans before submittal to DHEC for inclusion in the early action SIP. Once the local early action plan is incorporated into the early action SIP, any modifications will be treated as SIP revisions.
- E. Execution of this EAC by each Party shall be by signature of each Party's authorized representative. This agreement remains in effect until December 31, 2007.

## **II. Early Action Compact Requirements**

- A. **Milestones and Reporting**  
DHEC and local areas will assess progress towards developing and implementing the early action SIP and make a report available to EPA and the public every six months beginning in June 2003. As per EPA guidance, the key milestones for participation in the EAC are identified in the following table.

<b>Local Plan /Early Action SIP Milestones</b>		
<b>DATE</b>	<b>MILESTONE</b>	<b>RESPONSIBILITY</b>
<b>December 31, 2002</b>	EAC signed by all parties and submitted to EPA	Local/State/EPA
<b>June 16, 2003</b>	Discussion of control measures being considered to EPA	Local/State
<b>March 31, 2004</b>	Final local early action plan submitted to DHEC; copy to EPA	Local
<b>December 31, 2004</b>	Early Action State Implementation Plan submitted to EPA for incorporation into SIP	State
<b>April 1, 2005</b>	Local/State control strategies implemented no later than this date	Local/State
<b>September 30, 2005</b>	EPA takes final action on SIP submitted December 31, 2004	EPA
<b>June 30, 2006</b>	State submits progress report to EPA	State
<b>December 31, 2007</b>	Attainment of the 8-hour ozone standard	Local/State

B. Emissions Inventories

1. DHEC will be responsible for developing emissions inventories.
2. An initial modeling emissions inventory will be completed by December 31, 2002. This inventory includes:
  - a. Emissions modeling data for a 1998 episode that is representative of a typical ozone season exceedance that meets the EPA episode selection guidance;
  - b. MOBILE6 for determining on-road mobile emissions;
  - c. NONROAD model data; and,
  - d. Area source database utilizing population data allocated statewide.
3. A 2007 future year modeling emissions inventory will be developed by March 31, 2004. This inventory will sufficiently account for projected future growth in ozone precursor emissions through 2007, particularly from stationary, non-road and on-road mobile sources.
4. Additional inventories will be contingent upon legislative appropriations or other funding. Selection of specific episode inventories will be partially determined by the conceptual model, which reflects an analysis of meteorological conditions typical of high ozone events.
5. Emissions inventories will be compared and analyzed for trends in emission sources over time. The emissions inventory comparison and analysis will be completed by December 31, 2003.

C. Modeling

1. DHEC will be responsible for conducting the meteorological and air quality modeling analysis. DHEC will conduct the modeling analysis based on the "Draft Guidance on the use of Models and Other Analyses in Attainment Demonstrations for the 8-Hour Ozone NAAQS" (EPA-454/R-99-004, May 1999). The modeling will follow the guidance as facilitated by the EPA Regional Office.
2. Base case modeling will be completed by December 31, 2002. Future case modeling will be completed by October 31, 2003. One or more modeled control cases will be completed by January 31, 2004, with final revisions completed by March 31, 2004. All modeling will:
  - be SIP quality and perform within EPA's accepted margin of accuracy;
  - be carefully documented;
  - sufficiently account for projected future growth in ozone precursor emissions;
  - be accomplished by DHEC and reviewed by EPA; and,
  - be used to determine the effectiveness of NO<sub>x</sub> and/or VOC reductions. The control case(s) will be used to determine the relative effectiveness of different emission reduction strategies and to aid in the selection of appropriate emission reduction strategies.

D. Control Strategies

1. All adopted Federal and State control strategies that have been or will be implemented by the December 31, 2007, attainment date will be included in base, future and control case modeling.
2. Additional local and state control strategies under consideration will be identified by June 16, 2003. The local and state control strategies selected will be implemented as soon as practical, but no later than April 1, 2005.
3. Local and state control strategies will be specific, quantified, permanent and enforceable. The strategies will also include specific implementation dates and detailed documentation and reporting processes.
4. Voluntary strategies can play a supporting role in the local early action plan and the early action SIP. If emission reductions from voluntary strategies are quantified and credit is taken for them in the local early action plan or the early action SIP, those emission reductions will be enforceable. Additional strategies must be implemented to meet those quantified reduction requirements if quantified voluntary strategies fail. This is true for all quantified emission reductions.
5. Local and state control strategies will be designed and implemented with full stakeholder participation.

6. Local and state control strategies will be incorporated by DHEC into the early action SIP. In the event that the local area desires to add, delete or substitute strategies after early action SIP submittal, the local area will request a modification. Local early action plan modifications will be treated as SIP revisions and facilitated by DHEC.

E. Maintenance for Growth

1. The early action SIP will include a component to address emissions growth at least five years beyond December 31, 2007, ensuring that the areas will remain in attainment of the 8-hour ozone standard during that period. Attainment maintenance analysis will be completed by January 31, 2004, with final revisions completed by March 31, 2004. The analysis will employ one or more of the following or any other appropriate techniques necessary to make such a demonstration:
  - a. Modeling analysis showing ozone levels below the 8-hour ozone standard in 2012;
  - b. An annual review of growth (especially mobile and stationary source) to ensure control measures and growth assumptions are adequate;
  - c. Identification and quantification of federal, state, and/or local measures indicating sufficient reductions to offset growth estimates; or,
  - d. Any other appropriate techniques necessary to make such a determination.
2. The early action SIP must also detail a continuing planning process that includes modeling updates and modeling assumption verification (particularly growth assumptions). Modeling updates and planning processes must consider and evaluate the following:
  - a. All relevant actual new point sources;
  - b. Impacts from potential new source growth; and,
  - c. Future transportation patterns and their impact on air quality in a manner that is consistent with the most current adopted Long Range Transportation Plan and most current trend and projections of local motor vehicle emissions.
3. If the review of emissions growth in conjunction with the continuing planning process demonstrates that adopted emission reduction strategies are inadequate to address growth in emissions, additional measures will be added to the early action plan. Local planning processes should prepare for this possibility.
4. In the event that the continuing planning process identifies the need to add, delete, or substitute control strategies after the local early action plan has been incorporated into the early action SIP, the local area will initiate, and DHEC will facilitate a SIP revision to accommodate changes.

**F. Public Involvement**

1. Public involvement has been and will continue to be strongly encouraged during the planning and implementation process.
2. Public awareness programs will be used to provide opportunities for involvement in the planning process, implementation of control strategies, and any other issues important to the area.
3. Interested stakeholders (i.e., local, state, and federal government, citizens, public interest groups, and the business community) will continue to be involved in the planning process as early as possible. Planning meetings will be open to the public, with posted meeting times and locations. Early action SIP drafts will be publicly available, and the drafting process will have sufficient opportunities for comment from all interested stakeholders.
4. Opportunities for public comment on the proposed early action SIP will be provided and will follow the traditional SIP revision process as implemented by DHEC.
5. Semi-annual reports detailing, at a minimum, progress toward key milestones, will be made available to the public.
6. DHEC has established and will maintain a website for South Carolina's Early Action Plan for the 8-hour ozone standard, located at [www.scdhec.net/baq/eap.html](http://www.scdhec.net/baq/eap.html).

**III. Local Government Responsibilities**

The local governments agree to develop and implement a local early action plan that will promote the area's attainment by December 31, 2007, of the 8-hour ozone standard and maintenance until at least 2012. The local governments will develop this plan in coordination with the DHEC, EPA, stakeholders and the public. The local early action plan will include a process to evaluate the effectiveness and maintain long-term compliance with the standard.

After all adopted Federal and State controls that have been or will be implemented by the attainment date of December 31, 2007, are accounted for in the modeling, the local area must adopt additional local controls, as necessary to demonstrate attainment of the 8-hour ozone standard by December 31, 2007. Local controls under consideration must be identified and described by June 16, 2003. These measures must be included in the semi-annual report made available to the public.

The draft local early action plan will be submitted to DHEC by August 31, 2003. The final local early action plan will be submitted to DHEC, with a copy forwarded to EPA, by March 31, 2004. The adopted local early action plan will be included in the early action SIP due December 31, 2004.

In the event a development or issue arises that may impact performance or progress toward key milestones (including if a key milestone will be or has been missed and/or if a termination or modification has been requested), the responsible party will notify all other signatories in writing as soon as possible.

#### **IV. The South Carolina Department of Health and Environmental Control**

DHEC agrees to develop and implement a state early action SIP that will demonstrate the participating area's attainment by December 31, 2007, of the 8-hour ozone standard and maintenance until at least 2012. DHEC will develop this plan in coordination with the local governments, EPA, stakeholders and the public. The state early action SIP will include a process to monitor and maintain long-term compliance with the standard.

It is the responsibility of each state under the CAA to ensure attainment with all National Ambient Air Quality Standards. At any such time that an area is deemed non-attainment, the state will be required to develop a plan to return the area(s) to attainment in accordance with the CAA. If applicable, South Carolina is committed to working with adjacent states to assure mutual attainment of national standards.

In the event a development or issue arises that may impact performance or progress toward key milestones (including if a key milestone will be or has been missed and/or if a termination or modification has been requested), DHEC will notify all other signatories in writing as soon as possible.

DHEC will provide support to areas throughout the planning and implementation process by:

1. Developing emission inventories, modeling, trend analysis, and quantification and comparison of control measures.
2. Providing necessary information on all federal and state adopted emission reduction measures, which affect the area.
3. Providing technical and strategic assistance, as appropriate, in the selection and implementation of control strategies.
4. Providing technical and planning assistance in developing and implementing processes to address the impact of emissions growth beyond the attainment date.
5. Maintaining monitors and reporting and analysis of monitoring data.
6. Promoting public awareness efforts.
7. Coordinating communication between local areas and the EPA to facilitate continuing the EPA review of local work.
8. Ensuring expeditious review of local early action plan(s), and if deemed adequate, proposing modification of the early action SIP to adopt the early action plan.

9. Adopting control measures into the early action SIP as expeditiously as possible. The final complete early action SIP revision must be completed, adopted, and submitted by the state to the EPA by December 31, 2004.
10. Tracking progress. If any milestone is missed and EPA withdraws the deferred effective date, thereby triggering a non-attainment designation and applicable statutory requirements, the state will strive to submit a traditional non-attainment SIP within one year. However, due to the South Carolina legislative review process, it may take at least eighteen months.
11. Working concurrently with areas not electing to participate in the early action SIP process in preparing the traditional SIP submittal as required by the CAA.

## **V. The Environmental Protection Agency**

The EPA will participate by:

1. Recognizing the local area's and state's commitment to voluntarily adopt an early, substantive, enforceable, and scientifically-based attainment plan with early implementation of control measures by becoming a party to the EAC developed in conformance with South Carolina's Protocol for Early Action Compacts.
2. Providing technical assistance to the state(s) and local area(s) in the development of the early action plan.
3. Reviewing and approving the completed early action SIP by no later than September 30, 2005.
4. Deferring the effective date of non-attainment designation and related requirements for participating areas that fail to meet the 8-hour ozone standard as long as all terms and key milestones of the EAC are being met, including submission of the early action SIP revision by December 31, 2004.
5. Designating the area expeditiously as attainment and imposing no additional requirements, provided that the monitors in the area reflect attainment by December 31, 2007.
6. Taking action to withdraw the deferred effective date if the area violates the standard as of December 31, 2007, and the area has had the effective date of its non-attainment designation deferred. The area's non-attainment designation will become effective soon after.
7. Ensuring appropriate credit in the traditional SIP process for all emissions reductions from measures implemented in the early action SIP if the area does not meet all the terms of the EAC; including meeting agreed-upon key milestones and is designated (or re-designated if necessary) according to the EPA's 8-hour ozone implementation guidelines. The EPA will offer such an area no delays, exemptions, or other favorable treatment because of its participation in the EAC.

- ## VI. Signatures

Regional Administrator 12/30/02  
Title Date

Deputy Commissioner                      12/20/02  
Title    Date

<u>Chairman, Cherokee Co. Council</u>	<u>12/16/02</u>
<u>Title</u>	<u>Date</u>

**SOUTH CAROLINA'S 8-HOUR OZONE  
EARLY ACTION COMPACT  
Greenville County**

The United States Environmental Protection Agency (EPA) has provided an option for areas currently meeting the 1-hour ozone standard, like those in South Carolina, to attain the 8-hour ozone standard by December 31, 2007, and obtain cleaner air sooner than federally mandated. This option offers a more expeditious time line for achieving emissions reductions than expected under the EPA's 8-hour ozone implementation rulemaking, while providing "fail-safe" provisions for the area to revert to the traditional State Implementation Plan (SIP) process if specific milestones are not met. Through the development of this Early Action Compact (EAC), local, state, and EPA officials agree to work together to develop and implement local and state early action plans. The plans will become a part of the state early action SIP to reduce ground-level ozone concentrations to comply with the 8-hour ozone standard by December 31, 2007, and maintain the standard beyond that date. Failure to meet the obligations outlined in this EAC will result in immediate reversion to the traditional non-attainment designation process as required in the Clean Air Act (CAA).

In an effort to provide this information to areas within South Carolina, the South Carolina Department of Health and Environmental Control (DHEC) held six public meetings throughout the state. The locations of the meetings were targeted to areas that could potentially be designated as non-attainment for the 8-hour ozone standard. The meetings were held in Columbia, Greenville, Florence, Rock Hill, Aiken and Charleston. EPA officials participated in five of the six meetings. The general public, local government representatives, industry representatives, and environmental interest groups attended the meetings. Prior to the meetings, DHEC issued a press release regarding the development of an early action SIP. Correspondence including a fact sheet was sent to all county administrators, Councils of Governments, Metropolitan Planning Organizations, public interest groups, industry representatives, other state agencies and others determined to be stakeholders in the process.

The Parties to this (EAC) are: Greenville County, South Carolina Department of Health and Environmental Control (DHEC) and EPA.

**I. General Provisions**

- A. The parties commit to develop, implement and maintain the early action SIP (which includes the local early action plans) providing EPA defers the effective date of the non-attainment designation and related requirements as long as all conditions of the EAC and key milestones are met.
- B. If the potential area of non-attainment does not meet all the terms of the EAC, then it will forfeit its participation and will be subject to the full planning requirements under applicable CAA

traditional SIP processes including requirements defined as part of the EPA's 8-hour ozone implementation rulemaking.

- C. If the area has had the effective date of a non-attainment designation deferred and the area does not reach attainment of the standard by December 31, 2007, then the non-attainment designation will be effective. If the EPA's implementation schedule also requires a traditional SIP from areas on or before December 31, 2007, then a traditional SIP revision demonstrating attainment by the new attainment date will be due for the non-attainment area no later than December 31, 2008.
- D. Before formal adoption into the early action SIP, this agreement may be modified or terminated by mutual consent of all parties, or any party may withdraw from the agreement by notifying other parties in writing. If a party's withdrawal from the agreement prevents remaining signatories from satisfying any of the terms and milestones of the original agreement, the agreement will be void, any deferred effective date of the non-attainment designation would be withdrawn and the area's non-attainment designation would become effective soon after. Upon termination or withdrawal from the EAC, the area will be subject to the full planning requirements under applicable CAA traditional processes including requirements defined as part of the EPA's 8-hour ozone implementation rulemaking. The local government signatories will approve the local early action plans before submittal to DHEC for inclusion in the early action SIP. Once the local early action plan is incorporated into the early action SIP, any modifications will be treated as SIP revisions.
- E. Execution of this EAC by each Party shall be by signature of each Party's authorized representative. This agreement remains in effect until December 31, 2007.

## II. **Early Action Compact Requirements**

- A. **Milestones and Reporting**  
DHEC and local areas will assess progress towards developing and implementing the early action SIP and make a report available to EPA and the public every six months beginning in June 2003. As per EPA guidance, the key milestones for participation in the EAC are identified in the following table.

<b>Local Plan /Early Action SIP Milestones</b>		
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<b>December 31, 2007</b>	Attainment of the 8-hour ozone standard	Local/State

B. Emissions Inventories

1. DHEC will be responsible for developing emissions inventories.
2. An initial modeling emissions inventory will be completed by December 31, 2002. This inventory includes:
  - a. Emissions modeling data for a 1998 episode that is representative of a typical ozone season exceedance that meets the EPA episode selection guidance;
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3. A 2007 future year modeling emissions inventory will be developed by March 31, 2004. This inventory will sufficiently account for projected future growth in ozone precursor emissions through 2007, particularly from stationary, non-road and on-road mobile sources.
4. Additional inventories will be contingent upon legislative appropriations or other funding. Selection of specific episode inventories will be partially determined by the conceptual model, which reflects an analysis of meteorological conditions typical of high ozone events.
5. Emissions inventories will be compared and analyzed for trends in emission sources over time. The emissions inventory comparison and analysis will be completed by December 31, 2003.

C. Modeling

1. DHEC will be responsible for conducting the meteorological and air quality modeling analysis. DHEC will conduct the modeling analysis based on the "Draft Guidance on the use of Models and Other Analyses in Attainment Demonstrations for the 8-Hour Ozone NAAQS" (EPA-454/R-99-004, May 1999). The modeling will follow the guidance as facilitated by the EPA Regional Office.
2. Base case modeling will be completed by December 31, 2002. Future case modeling will be completed by October 31, 2003. One or more modeled control cases will be completed by January 31, 2004, with final revisions completed by March 31, 2004. All modeling will:
  - be SIP quality and perform within EPA's accepted margin of accuracy;
  - be carefully documented;
  - sufficiently account for projected future growth in ozone precursor emissions;
  - be accomplished by DHEC and reviewed by EPA; and,
  - be used to determine the effectiveness of NO<sub>x</sub> and/or VOC reductions. The control case(s) will be used to determine the relative effectiveness of different emission reduction strategies and to aid in the selection of appropriate emission reduction strategies.

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3. Local and state control strategies will be specific, quantified, permanent and enforceable. The strategies will also include specific implementation dates and detailed documentation and reporting processes.
4. Voluntary strategies can play a supporting role in the local early action plan and the early action SIP. If emission reductions from voluntary strategies are quantified and credit is taken for them in the local early action plan or the early action SIP, those emission reductions will be enforceable. Additional strategies must be implemented to meet those quantified reduction requirements if quantified voluntary strategies fail. This is true for all quantified emission reductions.
5. Local and state control strategies will be designed and implemented with full stakeholder participation.

6. Local and state control strategies will be incorporated by DHEC into the early action SIP. In the event that the local area desires to add, delete or substitute strategies after early action SIP submittal, the local area will request a modification. Local early action plan modifications will be treated as SIP revisions and facilitated by DHEC.

E. Maintenance for Growth

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  - a. Modeling analysis showing ozone levels below the 8-hour ozone standard in 2012;
  - b. An annual review of growth (especially mobile and stationary source) to ensure control measures and growth assumptions are adequate;
  - c. Identification and quantification of federal, state, and/or local measures indicating sufficient reductions to offset growth estimates; or,
  - d. Any other appropriate techniques necessary to make such a determination.
2. The early action SIP must also detail a continuing planning process that includes modeling updates and modeling assumption verification (particularly growth assumptions). Modeling updates and planning processes must consider and evaluate the following:
  - a. All relevant actual new point sources;
  - b. Impacts from potential new source growth; and,
  - c. Future transportation patterns and their impact on air quality in a manner that is consistent with the most current adopted Long Range Transportation Plan and most current trend and projections of local motor vehicle emissions.
3. If the review of emissions growth in conjunction with the continuing planning process demonstrates that adopted emission reduction strategies are inadequate to address growth in emissions, additional measures will be added to the early action plan. Local planning processes should prepare for this possibility.
4. In the event that the continuing planning process identifies the need to add, delete, or substitute control strategies after the local early action plan has been incorporated into the early action SIP, the local area will initiate, and DHEC will facilitate a SIP revision to accommodate changes.

F. Public Involvement

1. Public involvement has been and will continue to be strongly encouraged during the planning and implementation process.
2. Public awareness programs will be used to provide opportunities for involvement in the planning process, implementation of control strategies, and any other issues important to the area.
3. Interested stakeholders (i.e., local, state, and federal government, citizens, public interest groups, and the business community) will continue to be involved in the planning process as early as possible. Planning meetings will be open to the public, with posted meeting times and locations. Early action SIP drafts will be publicly available, and the drafting process will have sufficient opportunities for comment from all interested stakeholders.
4. Opportunities for public comment on the proposed early action SIP will be provided and will follow the traditional SIP revision process as implemented by DHEC.
5. Semi-annual reports detailing, at a minimum, progress toward key milestones, will be made available to the public.
6. DHEC has established and will maintain a website for South Carolina's Early Action Plan for the 8-hour ozone standard, located at [www.scdhec.net/baq/eap.html](http://www.scdhec.net/baq/eap.html).

**III. Local Government Responsibilities**

The local governments agree to develop and implement a local early action plan that will promote the area's attainment by December 31, 2007, of the 8-hour ozone standard and maintenance until at least 2012. The local governments will develop this plan in coordination with the DHEC, EPA, stakeholders and the public. The local early action plan will include a process to evaluate the effectiveness and maintain long-term compliance with the standard.

After all adopted Federal and State controls that have been or will be implemented by the attainment date of December 31, 2007, are accounted for in the modeling, the local area must adopt additional local controls, as necessary to demonstrate attainment of the 8-hour ozone standard by December 31, 2007. Local controls under consideration must be identified and described by June 16, 2003. These measures must be included in the semi-annual report made available to the public.

The draft local early action plan will be submitted to DHEC by August 31, 2003. The final local early action plan will be submitted to DHEC, with a copy forwarded to EPA, by March 31, 2004. The adopted local early action plan will be included in the early action SIP due December 31, 2004.

In the event a development or issue arises that may impact performance or progress toward key milestones (including if a key milestone will be or has been missed and/or if a termination or modification has been requested), the responsible party will notify all other signatories in writing as soon as possible.

#### **IV. The South Carolina Department of Health and Environmental Control**

DHEC agrees to develop and implement a state early action SIP that will demonstrate the participating area's attainment by December 31, 2007, of the 8-hour ozone standard and maintenance until at least 2012. DHEC will develop this plan in coordination with the local governments, EPA, stakeholders and the public. The state early action SIP will include a process to monitor and maintain long-term compliance with the standard.

It is the responsibility of each state under the CAA to ensure attainment with all National Ambient Air Quality Standards. At any such time that an area is deemed non-attainment, the state will be required to develop a plan to return the area(s) to attainment in accordance with the CAA. If applicable, South Carolina is committed to working with adjacent states to assure mutual attainment of national standards.

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3. Providing technical and strategic assistance, as appropriate, in the selection and implementation of control strategies.
4. Providing technical and planning assistance in developing and implementing processes to address the impact of emissions growth beyond the attainment date.
5. Maintaining monitors and reporting and analysis of monitoring data.
6. Promoting public awareness efforts.
7. Coordinating communication between local areas and the EPA to facilitate continuing the EPA review of local work.
8. Ensuring expeditious review of local early action plan(s), and if deemed adequate, proposing modification of the early action SIP to adopt the early action plan.

9. Adopting control measures into the early action SIP as expeditiously as possible. The final complete early action SIP revision must be completed, adopted, and submitted by the state to the EPA by December 31, 2004.
10. Tracking progress. If any milestone is missed and EPA withdraws the deferred effective date, thereby triggering a non-attainment designation and applicable statutory requirements, the state will strive to submit a traditional non-attainment SIP within one year. However, due to the South Carolina legislative review process, it may take at least eighteen months.
11. Working concurrently with areas not electing to participate in the early action SIP process in preparing the traditional SIP submittal as required by the CAA.

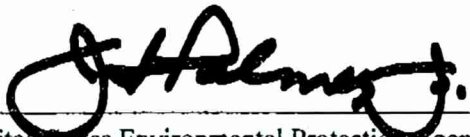
## **V. The Environmental Protection Agency**

The EPA will participate by:

1. Recognizing the local area's and state's commitment to voluntarily adopt an early, substantive, enforceable, and scientifically-based attainment plan with early implementation of control measures by becoming a party to the EAC developed in conformance with South Carolina's Protocol for Early Action Compacts.
2. Providing technical assistance to the state(s) and local area(s) in the development of the early action plan.
3. Reviewing and approving the completed early action SIP by no later than September 30, 2005.
4. Deferring the effective date of non-attainment designation and related requirements for participating areas that fail to meet the 8-hour ozone standard as long as all terms and key milestones of the EAC are being met, including submission of the early action SIP revision by December 31, 2004.
5. Designating the area expeditiously as attainment and imposing no additional requirements, provided that the monitors in the area reflect attainment by December 31, 2007.
6. Taking action to withdraw the deferred effective date if the area violates the standard as of December 31, 2007, and the area has had the effective date of its non-attainment designation deferred. The area's non-attainment designation will become effective soon after.
7. Ensuring appropriate credit in the traditional SIP process for all emissions reductions from measures implemented in the early action SIP if the area does not meet all the terms of the EAC; including meeting agreed-upon key milestones and is designated (or re-designated if necessary) according to the EPA's 8-hour ozone implementation guidelines. The EPA will offer such an area no delays, exemptions, or other favorable treatment because of its participation in the EAC.

8. Not allowing any area to renew their EAC after December 31, 2007, or initiate a new compact if it has previously forfeited its participation.

VI. Signatures

  
United States Environmental Protection Agency

Regional Administrator 12-30-02  
Title Date

R. Lenn Shaw  
South Carolina  
Department of Health and Environmental Control

Deputy Commissioner 12/20/02  
Title Date

St. L. Stuard  
Greenville County Representative

COUNTY ADMINISTRATOR 12-18-02  
Title Date

Doug Brooks  
Chairman, Greenville County Council

COUNTY COUNCIL CHAIRMAN 12-18-02  
Title Date

Theresa B. Fugate  
Clerk, Greenville County Council

CLERK TO COUNCIL 12-18-02  
Title Date

**SOUTH CAROLINA'S 8-HOUR OZONE  
EARLY ACTION COMPACT  
Oconee County**

The United States Environmental Protection Agency (EPA) has provided an option for areas currently meeting the 1-hour ozone standard, like those in South Carolina, to attain the 8-hour ozone standard by December 31, 2007, and obtain cleaner air sooner than federally mandated. This option offers a more expeditious time line for achieving emissions reductions than expected under the EPA's 8-hour ozone implementation rulemaking, while providing "fail-safe" provisions for the area to revert to the traditional State Implementation Plan (SIP) process if specific milestones are not met. Through the development of this Early Action Compact (EAC), local, state, and EPA officials agree to work together to develop and implement local and state early action plans. The plans will become a part of the state early action SIP to reduce ground-level ozone concentrations to comply with the 8-hour ozone standard by December 31, 2007, and maintain the standard beyond that date. Failure to meet the obligations outlined in this EAC will result in immediate reversion to the traditional non-attainment designation process as required in the Clean Air Act (CAA).

In an effort to provide this information to areas within South Carolina, the South Carolina Department of Health and Environmental Control (DHEC) held six public meetings throughout the state. The locations of the meetings were targeted to areas that could potentially be designated as non-attainment for the 8-hour ozone standard. The meetings were held in Columbia, Greenville, Florence, Rock Hill, Aiken and Charleston. EPA officials participated in five of the six meetings. The general public, local government representatives, industry representatives, and environmental interest groups attended the meetings. Prior to the meetings, DHEC issued a press release regarding the development of an early action SIP. Correspondence including a fact sheet was sent to all county administrators, Councils of Governments, Metropolitan Planning Organizations, public interest groups, industry representatives, other state agencies and others determined to be stakeholders in the process.

The Parties to this (EAC) are: Oconee County, South Carolina Department of Health and Environmental Control (DHEC) and EPA.

**I. General Provisions**

- A. The parties commit to develop, implement and maintain the early action SIP (which includes the local early action plans) providing EPA defers the effective date of the non-attainment designation and related requirements as long as all conditions of the EAC and key milestones are met.
- B. If the potential area of non-attainment does not meet all the terms of the EAC, then it will forfeit its participation and will be subject to the full planning requirements under applicable CAA

traditional SIP processes including requirements defined as part of the EPA's 8-hour ozone implementation rulemaking.

- C. If the area has had the effective date of a non-attainment designation deferred and the area does not reach attainment of the standard by December 31, 2007, then the non-attainment designation will be effective. If the EPA's implementation schedule also requires a traditional SIP from areas on or before December 31, 2007, then a traditional SIP revision demonstrating attainment by the new attainment date will be due for the non-attainment area no later than December 31, 2008.
- D. Before formal adoption into the early action SIP, this agreement may be modified or terminated by mutual consent of all parties, or any party may withdraw from the agreement by notifying other parties in writing. If a party's withdrawal from the agreement prevents remaining signatories from satisfying any of the terms and milestones of the original agreement, the agreement will be void, any deferred effective date of the non-attainment designation would be withdrawn and the area's non-attainment designation would become effective soon after. Upon termination or withdrawal from the EAC, the area will be subject to the full planning requirements under applicable CAA traditional processes including requirements defined as part of the EPA's 8-hour ozone implementation rulemaking. The local government signatories will approve the local early action plans before submittal to DHEC for inclusion in the early action SIP. Once the local early action plan is incorporated into the early action SIP, any modifications will be treated as SIP revisions.
- E. Execution of this EAC by each Party shall be by signature of each Party's authorized representative. This agreement remains in effect until December 31, 2007.

## II. **Early Action Compact Requirements**

- A. **Milestones and Reporting**  
DHEC and local areas will assess progress towards developing and implementing the early action SIP and make a report available to EPA and the public every six months beginning in June 2003. As per EPA guidance, the key milestones for participation in the EAC are identified in the following table.

<b>Local Plan /Early Action SIP Milestones</b>		
<b>DATE</b>	<b>MILESTONE</b>	<b>RESPONSIBILITY</b>
<b>December 31, 2002</b>	EAC signed by all parties and submitted to EPA	Local/State/EPA
<b>June 16, 2003</b>	Discussion of control measures being considered to EPA	Local/State
<b>March 31, 2004</b>	Final local early action plan submitted to DHEC; copy to EPA	Local
<b>December 31, 2004</b>	Early Action State Implementation Plan submitted to EPA for incorporation into SIP	State
<b>April 1, 2005</b>	Local/State control strategies implemented no later than this date	Local/State
<b>September 30, 2005</b>	EPA takes final action on SIP submitted December 31, 2004	EPA
<b>June 30, 2006</b>	State submits progress report to EPA	State
<b>December 31, 2007</b>	Attainment of the 8-hour ozone standard	Local/State

B. Emissions Inventories

1. DHEC will be responsible for developing emissions inventories.
2. An initial modeling emissions inventory will be completed by December 31, 2002. This inventory includes:
  - a. Emissions modeling data for a 1998 episode that is representative of a typical ozone season exceedance that meets the EPA episode selection guidance;
  - b. MOBILE6 for determining on-road mobile emissions;
  - c. NONROAD model data; and,
  - d. Area source database utilizing population data allocated statewide.
3. A 2007 future year modeling emissions inventory will be developed by March 31, 2004. This inventory will sufficiently account for projected future growth in ozone precursor emissions through 2007, particularly from stationary, non-road and on-road mobile sources.
4. Additional inventories will be contingent upon legislative appropriations or other funding. Selection of specific episode inventories will be partially determined by the conceptual model, which reflects an analysis of meteorological conditions typical of high ozone events.
5. Emissions inventories will be compared and analyzed for trends in emission sources over time. The emissions inventory comparison and analysis will be completed by December 31, 2003.

C. Modeling

1. DHEC will be responsible for conducting the meteorological and air quality modeling analysis. DHEC will conduct the modeling analysis based on the "Draft Guidance on the use of Models and Other Analyses in Attainment Demonstrations for the 8-Hour Ozone NAAQS" (EPA-454/R-99-004, May 1999). The modeling will follow the guidance as facilitated by the EPA Regional Office.
2. Base case modeling will be completed by December 31, 2002. Future case modeling will be completed by October 31, 2003. One or more modeled control cases will be completed by January 31, 2004, with final revisions completed by March 31, 2004. All modeling will:
  - be SIP quality and perform within EPA's accepted margin of accuracy;
  - be carefully documented;
  - sufficiently account for projected future growth in ozone precursor emissions;
  - be accomplished by DHEC and reviewed by EPA; and,
  - be used to determine the effectiveness of NO<sub>x</sub> and/or VOC reductions. The control case(s) will be used to determine the relative effectiveness of different emission reduction strategies and to aid in the selection of appropriate emission reduction strategies.

D. Control Strategies

1. All adopted Federal and State control strategies that have been or will be implemented by the December 31, 2007, attainment date will be included in base, future and control case modeling.
2. Additional local and state control strategies under consideration will be identified by June 16, 2003. The local and state control strategies selected will be implemented as soon as practical, but no later than April 1, 2005.
3. Local and state control strategies will be specific, quantified, permanent and enforceable. The strategies will also include specific implementation dates and detailed documentation and reporting processes.
4. Voluntary strategies can play a supporting role in the local early action plan and the early action SIP. If emission reductions from voluntary strategies are quantified and credit is taken for them in the local early action plan or the early action SIP, those emission reductions will be enforceable. Additional strategies must be implemented to meet those quantified reduction requirements if quantified voluntary strategies fail. This is true for all quantified emission reductions.
5. Local and state control strategies will be designed and implemented with full stakeholder participation.

6. Local and state control strategies will be incorporated by DHEC into the early action SIP. In the event that the local area desires to add, delete or substitute strategies after early action SIP submittal, the local area will request a modification. Local early action plan modifications will be treated as SIP revisions and facilitated by DHEC.

E. Maintenance for Growth

1. The early action SIP will include a component to address emissions growth at least five years beyond December 31, 2007, ensuring that the areas will remain in attainment of the 8-hour ozone standard during that period. Attainment maintenance analysis will be completed by January 31, 2004, with final revisions completed by March 31, 2004. The analysis will employ one or more of the following or any other appropriate techniques necessary to make such a demonstration:
  - a. Modeling analysis showing ozone levels below the 8-hour ozone standard in 2012;
  - b. An annual review of growth (especially mobile and stationary source) to ensure control measures and growth assumptions are adequate;
  - c. Identification and quantification of federal, state, and/or local measures indicating sufficient reductions to offset growth estimates; or,
  - d. Any other appropriate techniques necessary to make such a determination.
2. The early action SIP must also detail a continuing planning process that includes modeling updates and modeling assumption verification (particularly growth assumptions). Modeling updates and planning processes must consider and evaluate the following:
  - a. All relevant actual new point sources;
  - b. Impacts from potential new source growth; and,
  - c. Future transportation patterns and their impact on air quality in a manner that is consistent with the most current adopted Long Range Transportation Plan and most current trend and projections of local motor vehicle emissions.
3. If the review of emissions growth in conjunction with the continuing planning process demonstrates that adopted emission reduction strategies are inadequate to address growth in emissions, additional measures will be added to the early action plan. Local planning processes should prepare for this possibility.
4. In the event that the continuing planning process identifies the need to add, delete, or substitute control strategies after the local early action plan has been incorporated into the early action SIP, the local area will initiate, and DHEC will facilitate a SIP revision to accommodate changes.

**F. Public Involvement**

1. Public involvement has been and will continue to be strongly encouraged during the planning and implementation process.
2. Public awareness programs will be used to provide opportunities for involvement in the planning process, implementation of control strategies, and any other issues important to the area.
3. Interested stakeholders (i.e., local, state, and federal government, citizens, public interest groups, and the business community) will continue to be involved in the planning process as early as possible. Planning meetings will be open to the public, with posted meeting times and locations. Early action SIP drafts will be publicly available, and the drafting process will have sufficient opportunities for comment from all interested stakeholders.
4. Opportunities for public comment on the proposed early action SIP will be provided and will follow the traditional SIP revision process as implemented by DHEC.
5. Semi-annual reports detailing, at a minimum, progress toward key milestones, will be made available to the public.
6. DHEC has established and will maintain a website for South Carolina's Early Action Plan for the 8-hour ozone standard, located at [www.scdhec.net/baq/eap.html](http://www.scdhec.net/baq/eap.html).

**III. Local Government Responsibilities**

The local governments agree to develop and implement a local early action plan that will promote the area's attainment by December 31, 2007, of the 8-hour ozone standard and maintenance until at least 2012. The local governments will develop this plan in coordination with the DHEC, EPA, stakeholders and the public. The local early action plan will include a process to evaluate the effectiveness and maintain long-term compliance with the standard.

After all adopted Federal and State controls that have been or will be implemented by the attainment date of December 31, 2007, are accounted for in the modeling, the local area must adopt additional local controls, as necessary to demonstrate attainment of the 8-hour ozone standard by December 31, 2007. Local controls under consideration must be identified and described by June 16, 2003. These measures must be included in the semi-annual report made available to the public.

The draft local early action plan will be submitted to DHEC by August 31, 2003. The final local early action plan will be submitted to DHEC, with a copy forwarded to EPA, by March 31, 2004. The adopted local early action plan will be included in the early action SIP due December 31, 2004.

In the event a development or issue arises that may impact performance or progress toward key milestones (including if a key milestone will be or has been missed and/or if a termination or modification has been requested), the responsible party will notify all other signatories in writing as soon as possible.

#### **IV. The South Carolina Department of Health and Environmental Control**

DHEC agrees to develop and implement a state early action SIP that will demonstrate the participating area's attainment by December 31, 2007, of the 8-hour ozone standard and maintenance until at least 2012. DHEC will develop this plan in coordination with the local governments, EPA, stakeholders and the public. The state early action SIP will include a process to monitor and maintain long-term compliance with the standard.

It is the responsibility of each state under the CAA to ensure attainment with all National Ambient Air Quality Standards. At any such time that an area is deemed non-attainment, the state will be required to develop a plan to return the area(s) to attainment in accordance with the CAA. If applicable, South Carolina is committed to working with adjacent states to assure mutual attainment of national standards.

In the event a development or issue arises that may impact performance or progress toward key milestones (including if a key milestone will be or has been missed and/or if a termination or modification has been requested), DHEC will notify all other signatories in writing as soon as possible.

DHEC will provide support to areas throughout the planning and implementation process by:

1. Developing emission inventories, modeling, trend analysis, and quantification and comparison of control measures.
2. Providing necessary information on all federal and state adopted emission reduction measures, which affect the area.
3. Providing technical and strategic assistance, as appropriate, in the selection and implementation of control strategies.
4. Providing technical and planning assistance in developing and implementing processes to address the impact of emissions growth beyond the attainment date.
5. Maintaining monitors and reporting and analysis of monitoring data.
6. Promoting public awareness efforts.
7. Coordinating communication between local areas and the EPA to facilitate continuing the EPA review of local work.
8. Ensuring expeditious review of local early action plan(s), and if deemed adequate, proposing modification of the early action SIP to adopt the early action plan.

9. Adopting control measures into the early action SIP as expeditiously as possible. The final complete early action SIP revision must be completed, adopted, and submitted by the state to the EPA by December 31, 2004.
10. Tracking progress. If any milestone is missed and EPA withdraws the deferred effective date, thereby triggering a non-attainment designation and applicable statutory requirements, the state will strive to submit a traditional non-attainment SIP within one year. However, due to the South Carolina legislative review process, it may take at least eighteen months.
11. Working concurrently with areas not electing to participate in the early action SIP process in preparing the traditional SIP submittal as required by the CAA.

## **V. The Environmental Protection Agency**

The EPA will participate by:

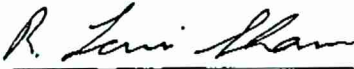
1. Recognizing the local area's and state's commitment to voluntarily adopt an early, substantive, enforceable, and scientifically-based attainment plan with early implementation of control measures by becoming a party to the EAC developed in conformance with South Carolina's Protocol for Early Action Compacts.
2. Providing technical assistance to the state(s) and local area(s) in the development of the early action plan.
3. Reviewing and approving the completed early action SIP by no later than September 30, 2005.
4. Deferring the effective date of non-attainment designation and related requirements for participating areas that fail to meet the 8-hour ozone standard as long as all terms and key milestones of the EAC are being met, including submission of the early action SIP revision by December 31, 2004.
5. Designating the area expeditiously as attainment and imposing no additional requirements, provided that the monitors in the area reflect attainment by December 31, 2007.
6. Taking action to withdraw the deferred effective date if the area violates the standard as of December 31, 2007, and the area has had the effective date of its non-attainment designation deferred. The area's non-attainment designation will become effective soon after.
7. Ensuring appropriate credit in the traditional SIP process for all emissions reductions from measures implemented in the early action SIP if the area does not meet all the terms of the EAC; including meeting agreed-upon key milestones and is designated (or re-designated if necessary) according to the EPA's 8-hour ozone implementation guidelines. The EPA will offer such an area no delays, exemptions, or other favorable treatment because of its participation in the EAC.

8. Not allowing any area to renew their EAC after December 31, 2007, or initiate a new compact if it has previously forfeited its participation.

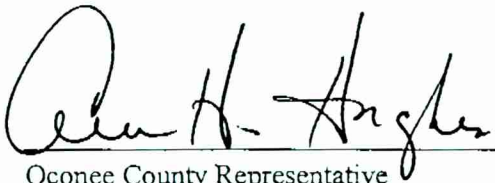
VI. Signatures

  
United States Environmental Protection Agency

Regional Administrator 12-30-0  
Title Date

  
South Carolina  
Department of Health and Environmental Control

Deputy Commissioner 12/20/02  
Title Date

  
Oconee County Representative

Co Supervisor 12/03/02  
Title Date

**SOUTH CAROLINA'S 8-HOUR OZONE  
EARLY ACTION COMPACT  
Pickens County**

The United States Environmental Protection Agency (EPA) has provided an option for areas currently meeting the 1-hour ozone standard, like those in South Carolina, to attain the 8-hour ozone standard by December 31, 2007, and obtain cleaner air sooner than federally mandated. This option offers a more expeditious time line for achieving emissions reductions than expected under the EPA's 8-hour ozone implementation rulemaking, while providing "fail-safe" provisions for the area to revert to the traditional State Implementation Plan (SIP) process if specific milestones are not met. Through the development of this Early Action Compact (EAC), local, state, and EPA officials agree to work together to develop and implement local and state early action plans. The plans will become a part of the state early action SIP to reduce ground-level ozone concentrations to comply with the 8-hour ozone standard by December 31, 2007, and maintain the standard beyond that date. Failure to meet the obligations outlined in this EAC will result in immediate reversion to the traditional non-attainment designation process as required in the Clean Air Act (CAA).

In an effort to provide this information to areas within South Carolina, the South Carolina Department of Health and Environmental Control (DHEC) held six public meetings throughout the state. The locations of the meetings were targeted to areas that could potentially be designated as non-attainment for the 8-hour ozone standard. The meetings were held in Columbia, Greenville, Florence, Rock Hill, Aiken and Charleston. EPA officials participated in five of the six meetings. The general public, local government representatives, industry representatives, and environmental interest groups attended the meetings. Prior to the meetings, DHEC issued a press release regarding the development of an early action SIP. Correspondence including a fact sheet was sent to all county administrators, Councils of Governments, Metropolitan Planning Organizations, public interest groups, industry representatives, other state agencies and others determined to be stakeholders in the process.

The Parties to this (EAC) are: Pickens County, South Carolina Department of Health and Environmental Control (DHEC) and EPA.

**I. General Provisions**

- A. The parties commit to develop, implement and maintain the early action SIP (which includes the local early action plans) providing EPA defers the effective date of the non-attainment designation and related requirements as long as all conditions of the EAC and key milestones are met.
- B. If the potential area of non-attainment does not meet all the terms of the EAC, then it will forfeit its participation and will be subject to the full planning requirements under applicable CAA

traditional SIP processes including requirements defined as part of the EPA's 8-hour ozone implementation rulemaking.

- C. If the area has had the effective date of a non-attainment designation deferred and the area does not reach attainment of the standard by December 31, 2007, then the non-attainment designation will be effective. If the EPA's implementation schedule also requires a traditional SIP from areas on or before December 31, 2007, then a traditional SIP revision demonstrating attainment by the new attainment date will be due for the non-attainment area no later than December 31, 2008.
- D. Before formal adoption into the early action SIP, this agreement may be modified or terminated by mutual consent of all parties, or any party may withdraw from the agreement by notifying other parties in writing. If a party's withdrawal from the agreement prevents remaining signatories from satisfying any of the terms and milestones of the original agreement, the agreement will be void, any deferred effective date of the non-attainment designation would be withdrawn and the area's non-attainment designation would become effective soon after. Upon termination or withdrawal from the EAC, the area will be subject to the full planning requirements under applicable CAA traditional processes including requirements defined as part of the EPA's 8-hour ozone implementation rulemaking. The local government signatories will approve the local early action plans before submittal to DHEC for inclusion in the early action SIP. Once the local early action plan is incorporated into the early action SIP, any modifications will be treated as SIP revisions.
- E. Execution of this EAC by each Party shall be by signature of each Party's authorized representative. This agreement remains in effect until December 31, 2007.

## II. **Early Action Compact Requirements**

- A. **Milestones and Reporting**  
DHEC and local areas will assess progress towards developing and implementing the early action SIP and make a report available to EPA and the public every six months beginning in June 2003. As per EPA guidance, the key milestones for participation in the EAC are identified in the following table.

<b>Local Plan /Early Action SIP Milestones</b>		
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<b>September 30, 2005</b>	EPA takes final action on SIP submitted December 31, 2004	EPA
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<b>December 31, 2007</b>	Attainment of the 8-hour ozone standard	Local/State

B. Emissions Inventories

1. DHEC will be responsible for developing emissions inventories.
2. An initial modeling emissions inventory will be completed by December 31, 2002. This inventory includes:
  - a. Emissions modeling data for a 1998 episode that is representative of a typical ozone season exceedance that meets the EPA episode selection guidance;
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  - be SIP quality and perform within EPA's accepted margin of accuracy;
  - be carefully documented;
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  - be accomplished by DHEC and reviewed by EPA; and,
  - be used to determine the effectiveness of NO<sub>x</sub> and/or VOC reductions. The control case(s) will be used to determine the relative effectiveness of different emission reduction strategies and to aid in the selection of appropriate emission reduction strategies.

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1. All adopted Federal and State control strategies that have been or will be implemented by the December 31, 2007, attainment date will be included in base, future and control case modeling.
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  - a. Modeling analysis showing ozone levels below the 8-hour ozone standard in 2012;
  - b. An annual review of growth (especially mobile and stationary source) to ensure control measures and growth assumptions are adequate;
  - c. Identification and quantification of federal, state, and/or local measures indicating sufficient reductions to offset growth estimates; or,
  - d. Any other appropriate techniques necessary to make such a determination.
2. The early action SIP must also detail a continuing planning process that includes modeling updates and modeling assumption verification (particularly growth assumptions). Modeling updates and planning processes must consider and evaluate the following:
  - a. All relevant actual new point sources;
  - b. Impacts from potential new source growth; and,
  - c. Future transportation patterns and their impact on air quality in a manner that is consistent with the most current adopted Long Range Transportation Plan and most current trend and projections of local motor vehicle emissions.
3. If the review of emissions growth in conjunction with the continuing planning process demonstrates that adopted emission reduction strategies are inadequate to address growth in emissions, additional measures will be added to the early action plan. Local planning processes should prepare for this possibility.
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**F. Public Involvement**

1. Public involvement has been and will continue to be strongly encouraged during the planning and implementation process.
2. Public awareness programs will be used to provide opportunities for involvement in the planning process, implementation of control strategies, and any other issues important to the area.
3. Interested stakeholders (i.e., local, state, and federal government, citizens, public interest groups, and the business community) will continue to be involved in the planning process as early as possible. Planning meetings will be open to the public, with posted meeting times and locations. Early action SIP drafts will be publicly available, and the drafting process will have sufficient opportunities for comment from all interested stakeholders.
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5. Semi-annual reports detailing, at a minimum, progress toward key milestones, will be made available to the public.
6. DHEC has established and will maintain a website for South Carolina's Early Action Plan for the 8-hour ozone standard, located at [www.scdhec.net/baq/eap.html](http://www.scdhec.net/baq/eap.html).

**III. Local Government Responsibilities**

The local governments agree to develop and implement a local early action plan that will promote the area's attainment by December 31, 2007, of the 8-hour ozone standard and maintenance until at least 2012. The local governments will develop this plan in coordination with the DHEC, EPA, stakeholders and the public. The local early action plan will include a process to evaluate the effectiveness and maintain long-term compliance with the standard.

After all adopted Federal and State controls that have been or will be implemented by the attainment date of December 31, 2007, are accounted for in the modeling, the local area must adopt additional local controls, as necessary to demonstrate attainment of the 8-hour ozone standard by December 31, 2007. Local controls under consideration must be identified and described by June 16, 2003. These measures must be included in the semi-annual report made available to the public.

The draft local early action plan will be submitted to DHEC by August 31, 2003. The final local early action plan will be submitted to DHEC, with a copy forwarded to EPA, by March 31, 2004. The adopted local early action plan will be included in the early action SIP due December 31, 2004.

In the event a development or issue arises that may impact performance or progress toward key milestones (including if a key milestone will be or has been missed and/or if a termination or modification has been requested), the responsible party will notify all other signatories in writing as soon as possible.

#### **IV. The South Carolina Department of Health and Environmental Control**

DHEC agrees to develop and implement a state early action SIP that will demonstrate the participating area's attainment by December 31, 2007, of the 8-hour ozone standard and maintenance until at least 2012. DHEC will develop this plan in coordination with the local governments, EPA, stakeholders and the public. The state early action SIP will include a process to monitor and maintain long-term compliance with the standard.

It is the responsibility of each state under the CAA to ensure attainment with all National Ambient Air Quality Standards. At any such time that an area is deemed non-attainment, the state will be required to develop a plan to return the area(s) to attainment in accordance with the CAA. If applicable, South Carolina is committed to working with adjacent states to assure mutual attainment of national standards.

In the event a development or issue arises that may impact performance or progress toward key milestones (including if a key milestone will be or has been missed and/or if a termination or modification has been requested), DHEC will notify all other signatories in writing as soon as possible.

DHEC will provide support to areas throughout the planning and implementation process by:

1. Developing emission inventories, modeling, trend analysis, and quantification and comparison of control measures.
2. Providing necessary information on all federal and state adopted emission reduction measures, which affect the area.
3. Providing technical and strategic assistance, as appropriate, in the selection and implementation of control strategies.
4. Providing technical and planning assistance in developing and implementing processes to address the impact of emissions growth beyond the attainment date.
5. Maintaining monitors and reporting and analysis of monitoring data.
6. Promoting public awareness efforts.
7. Coordinating communication between local areas and the EPA to facilitate continuing the EPA review of local work.
8. Ensuring expeditious review of local early action plan(s), and if deemed adequate, proposing modification of the early action SIP to adopt the early action plan.

9. Adopting control measures into the early action SIP as expeditiously as possible. The final complete early action SIP revision must be completed, adopted, and submitted by the state to the EPA by December 31, 2004.
10. Tracking progress. If any milestone is missed and EPA withdraws the deferred effective date, thereby triggering a non-attainment designation and applicable statutory requirements, the state will strive to submit a traditional non-attainment SIP within one year. However, due to the South Carolina legislative review process, it may take at least eighteen months.
11. Working concurrently with areas not electing to participate in the early action SIP process in preparing the traditional SIP submittal as required by the CAA.

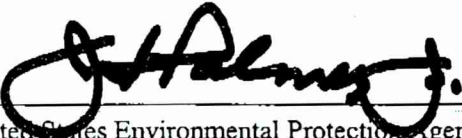
## **V. The Environmental Protection Agency**

The EPA will participate by:

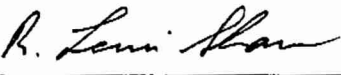
1. Recognizing the local area's and state's commitment to voluntarily adopt an early, substantive, enforceable, and scientifically-based attainment plan with early implementation of control measures by becoming a party to the EAC developed in conformance with South Carolina's Protocol for Early Action Compacts.
2. Providing technical assistance to the state(s) and local area(s) in the development of the early action plan.
3. Reviewing and approving the completed early action SIP by no later than September 30, 2005.
4. Deferring the effective date of non-attainment designation and related requirements for participating areas that fail to meet the 8-hour ozone standard as long as all terms and key milestones of the EAC are being met, including submission of the early action SIP revision by December 31, 2004.
5. Designating the area expeditiously as attainment and imposing no additional requirements, provided that the monitors in the area reflect attainment by December 31, 2007.
6. Taking action to withdraw the deferred effective date if the area violates the standard as of December 31, 2007, and the area has had the effective date of its non-attainment designation deferred. The area's non-attainment designation will become effective soon after.
7. Ensuring appropriate credit in the traditional SIP process for all emissions reductions from measures implemented in the early action SIP if the area does not meet all the terms of the EAC; including meeting agreed-upon key milestones and is designated (or re-designated if necessary) according to the EPA's 8-hour ozone implementation guidelines. The EPA will offer such an area no delays, exemptions, or other favorable treatment because of its participation in the EAC.

8. Not allowing any area to renew their EAC after December 31, 2007, or initiate a new compact if it has previously forfeited its participation.

VI. Signatures

  
United States Environmental Protection Agency

Regional Administrator 12-30-02  
Title Date

  
South Carolina  
Department of Health and Environmental Control

Deputy Commissioner 12/20/02  
Title Date

  
Pickens County Representative

County Administrator 11/27/02  
Title Date

**SOUTH CAROLINA'S 8-HOUR OZONE  
EARLY ACTION COMPACT  
Spartanburg County**

The United States Environmental Protection Agency (EPA) has provided an option for areas currently meeting the 1-hour ozone standard, like those in South Carolina, to attain the 8-hour ozone standard by December 31, 2007, and obtain cleaner air sooner than federally mandated. This option offers a more expeditious time line for achieving emissions reductions than expected under the EPA's 8-hour ozone implementation rulemaking, while providing "fail-safe" provisions for the area to revert to the traditional State Implementation Plan (SIP) process if specific milestones are not met. Through the development of this Early Action Compact (EAC), local, state, and EPA officials agree to work together to develop and implement local and state early action plans. The plans will become a part of the state early action SIP to reduce ground-level ozone concentrations to comply with the 8-hour ozone standard by December 31, 2007, and maintain the standard beyond that date. Failure to meet the obligations outlined in this EAC will result in immediate reversion to the traditional non-attainment designation process as required in the Clean Air Act (CAA).

In an effort to provide this information to areas within South Carolina, the South Carolina Department of Health and Environmental Control (DHEC) held six public meetings throughout the state. The locations of the meetings were targeted to areas that could potentially be designated as non-attainment for the 8-hour ozone standard. The meetings were held in Columbia, Greenville, Florence, Rock Hill, Aiken and Charleston. EPA officials participated in five of the six meetings. The general public, local government representatives, industry representatives, and environmental interest groups attended the meetings. Prior to the meetings, DHEC issued a press release regarding the development of an early action SIP. Correspondence including a fact sheet was sent to all county administrators, Councils of Governments, Metropolitan Planning Organizations, public interest groups, industry representatives, other state agencies and others determined to be stakeholders in the process.

The Parties to this (EAC) are: Spartanburg County, South Carolina Department of Health and Environmental Control (DHEC) and EPA.

**I. General Provisions**

- A. The parties commit to develop, implement and maintain the early action SIP (which includes the local early action plans) providing EPA defers the effective date of the non-attainment designation and related requirements as long as all conditions of the EAC and key milestones are met.
- B. If the potential area of non-attainment does not meet all the terms of the EAC, then it will forfeit its participation and will be subject to the full planning requirements under applicable CAA

traditional SIP processes including requirements defined as part of the EPA's 8-hour ozone implementation rulemaking.

- C. If the area has had the effective date of a non-attainment designation deferred and the area does not reach attainment of the standard by December 31, 2007, then the non-attainment designation will be effective. If the EPA's implementation schedule also requires a traditional SIP from areas on or before December 31, 2007, then a traditional SIP revision demonstrating attainment by the new attainment date will be due for the non-attainment area no later than December 31, 2008.
- D. Before formal adoption into the early action SIP, this agreement may be modified or terminated by mutual consent of all parties, or any party may withdraw from the agreement by notifying other parties in writing. If a party's withdrawal from the agreement prevents remaining signatories from satisfying any of the terms and milestones of the original agreement, the agreement will be void, any deferred effective date of the non-attainment designation would be withdrawn and the area's non-attainment designation would become effective soon after. Upon termination or withdrawal from the EAC, the area will be subject to the full planning requirements under applicable CAA traditional processes including requirements defined as part of the EPA's 8-hour ozone implementation rulemaking. The local government signatories will approve the local early action plans before submittal to DHEC for inclusion in the early action SIP. Once the local early action plan is incorporated into the early action SIP, any modifications will be treated as SIP revisions.
- E. Execution of this EAC by each Party shall be by signature of each Party's authorized representative. This agreement remains in effect until December 31, 2007.

## II. **Early Action Compact Requirements**

- A. **Milestones and Reporting**  
DHEC and local areas will assess progress towards developing and implementing the early action SIP and make a report available to EPA and the public every six months beginning in June 2003. As per EPA guidance, the key milestones for participation in the EAC are identified in the following table.

<b>Local Plan /Early Action SIP Milestones</b>		
<b>DATE</b>	<b>MILESTONE</b>	<b>RESPONSIBILITY</b>
<b>December 31, 2002</b>	EAC signed by all parties and submitted to EPA	Local/State/EPA
<b>June 16, 2003</b>	Discussion of control measures being considered to EPA	Local/State
<b>March 31, 2004</b>	Final local early action plan submitted to DHEC; copy to EPA	Local
<b>December 31, 2004</b>	Early Action State Implementation Plan submitted to EPA for incorporation into SIP	State
<b>April 1, 2005</b>	Local/State control strategies implemented no later than this date	Local/State
<b>September 30, 2005</b>	EPA takes final action on SIP submitted December 31, 2004	EPA
<b>June 30, 2006</b>	State submits progress report to EPA	State
<b>December 31, 2007</b>	Attainment of the 8-hour ozone standard	Local/State

B. Emissions Inventories

1. DHEC will be responsible for developing emissions inventories.
2. An initial modeling emissions inventory will be completed by December 31, 2002. This inventory includes:
  - a. Emissions modeling data for a 1998 episode that is representative of a typical ozone season exceedance that meets the EPA episode selection guidance;
  - b. MOBILE6 for determining on-road mobile emissions;
  - c. NONROAD model data; and,
  - d. Area source database utilizing population data allocated statewide.
3. A 2007 future year modeling emissions inventory will be developed by March 31, 2004. This inventory will sufficiently account for projected future growth in ozone precursor emissions through 2007, particularly from stationary, non-road and on-road mobile sources.
4. Additional inventories will be contingent upon legislative appropriations or other funding. Selection of specific episode inventories will be partially determined by the conceptual model, which reflects an analysis of meteorological conditions typical of high ozone events.
5. Emissions inventories will be compared and analyzed for trends in emission sources over time. The emissions inventory comparison and analysis will be completed by December 31, 2003.

C. Modeling

1. DHEC will be responsible for conducting the meteorological and air quality modeling analysis. DHEC will conduct the modeling analysis based on the "Draft Guidance on the use of Models and Other Analyses in Attainment Demonstrations for the 8-Hour Ozone NAAQS" (EPA-454/R-99-004, May 1999). The modeling will follow the guidance as facilitated by the EPA Regional Office.
2. Base case modeling will be completed by December 31, 2002. Future case modeling will be completed by October 31, 2003. One or more modeled control cases will be completed by January 31, 2004, with final revisions completed by March 31, 2004. All modeling will:
  - be SIP quality and perform within EPA's accepted margin of accuracy;
  - be carefully documented;
  - sufficiently account for projected future growth in ozone precursor emissions;
  - be accomplished by DHEC and reviewed by EPA; and,
  - be used to determine the effectiveness of NO<sub>x</sub> and/or VOC reductions. The control case(s) will be used to determine the relative effectiveness of different emission reduction strategies and to aid in the selection of appropriate emission reduction strategies.

D. Control Strategies

1. All adopted Federal and State control strategies that have been or will be implemented by the December 31, 2007, attainment date will be included in base, future and control case modeling.
2. Additional local and state control strategies under consideration will be identified by June 16, 2003. The local and state control strategies selected will be implemented as soon as practical, but no later than April 1, 2005.
3. Local and state control strategies will be specific, quantified, permanent and enforceable. The strategies will also include specific implementation dates and detailed documentation and reporting processes.
4. Voluntary strategies can play a supporting role in the local early action plan and the early action SIP. If emission reductions from voluntary strategies are quantified and credit is taken for them in the local early action plan or the early action SIP, those emission reductions will be enforceable. Additional strategies must be implemented to meet those quantified reduction requirements if quantified voluntary strategies fail. This is true for all quantified emission reductions.
5. Local and state control strategies will be designed and implemented with full stakeholder participation.

6. Local and state control strategies will be incorporated by DHEC into the early action SIP. In the event that the local area desires to add, delete or substitute strategies after early action SIP submittal, the local area will request a modification. Local early action plan modifications will be treated as SIP revisions and facilitated by DHEC.

E. Maintenance for Growth

1. The early action SIP will include a component to address emissions growth at least five years beyond December 31, 2007, ensuring that the areas will remain in attainment of the 8-hour ozone standard during that period. Attainment maintenance analysis will be completed by January 31, 2004, with final revisions completed by March 31, 2004. The analysis will employ one or more of the following or any other appropriate techniques necessary to make such a demonstration:
  - a. Modeling analysis showing ozone levels below the 8-hour ozone standard in 2012;
  - b. An annual review of growth (especially mobile and stationary source) to ensure control measures and growth assumptions are adequate;
  - c. Identification and quantification of federal, state, and/or local measures indicating sufficient reductions to offset growth estimates; or,
  - d. Any other appropriate techniques necessary to make such a determination.
2. The early action SIP must also detail a continuing planning process that includes modeling updates and modeling assumption verification (particularly growth assumptions). Modeling updates and planning processes must consider and evaluate the following:
  - a. All relevant actual new point sources;
  - b. Impacts from potential new source growth; and,
  - c. Future transportation patterns and their impact on air quality in a manner that is consistent with the most current adopted Long Range Transportation Plan and most current trend and projections of local motor vehicle emissions.
3. If the review of emissions growth in conjunction with the continuing planning process demonstrates that adopted emission reduction strategies are inadequate to address growth in emissions, additional measures will be added to the early action plan. Local planning processes should prepare for this possibility.
4. In the event that the continuing planning process identifies the need to add, delete, or substitute control strategies after the local early action plan has been incorporated into the early action SIP, the local area will initiate, and DHEC will facilitate a SIP revision to accommodate changes.

**F. Public Involvement**

1. Public involvement has been and will continue to be strongly encouraged during the planning and implementation process.
2. Public awareness programs will be used to provide opportunities for involvement in the planning process, implementation of control strategies, and any other issues important to the area.
3. Interested stakeholders (i.e., local, state, and federal government, citizens, public interest groups, and the business community) will continue to be involved in the planning process as early as possible. Planning meetings will be open to the public, with posted meeting times and locations. Early action SIP drafts will be publicly available, and the drafting process will have sufficient opportunities for comment from all interested stakeholders.
4. Opportunities for public comment on the proposed early action SIP will be provided and will follow the traditional SIP revision process as implemented by DHEC.
5. Semi-annual reports detailing, at a minimum, progress toward key milestones, will be made available to the public.
6. DHEC has established and will maintain a website for South Carolina's Early Action Plan for the 8-hour ozone standard, located at [www.scdhec.net/baq/eap.html](http://www.scdhec.net/baq/eap.html).

**III. Local Government Responsibilities**

The local governments agree to develop and implement a local early action plan that will promote the area's attainment by December 31, 2007, of the 8-hour ozone standard and maintenance until at least 2012. The local governments will develop this plan in coordination with the DHEC, EPA, stakeholders and the public. The local early action plan will include a process to evaluate the effectiveness and maintain long-term compliance with the standard.

After all adopted Federal and State controls that have been or will be implemented by the attainment date of December 31, 2007, are accounted for in the modeling, the local area must adopt additional local controls, as necessary to demonstrate attainment of the 8-hour ozone standard by December 31, 2007. Local controls under consideration must be identified and described by June 16, 2003. These measures must be included in the semi-annual report made available to the public.

The draft local early action plan will be submitted to DHEC by August 31, 2003. The final local early action plan will be submitted to DHEC, with a copy forwarded to EPA, by March 31, 2004. The adopted local early action plan will be included in the early action SIP due December 31, 2004.

In the event a development or issue arises that may impact performance or progress toward key milestones (including if a key milestone will be or has been missed and/or if a termination or modification has been requested), the responsible party will notify all other signatories in writing as soon as possible.

#### **IV. The South Carolina Department of Health and Environmental Control**

DHEC agrees to develop and implement a state early action SIP that will demonstrate the participating area's attainment by December 31, 2007, of the 8-hour ozone standard and maintenance until at least 2012. DHEC will develop this plan in coordination with the local governments, EPA, stakeholders and the public. The state early action SIP will include a process to monitor and maintain long-term compliance with the standard.

It is the responsibility of each state under the CAA to ensure attainment with all National Ambient Air Quality Standards. At any such time that an area is deemed non-attainment, the state will be required to develop a plan to return the area(s) to attainment in accordance with the CAA. If applicable, South Carolina is committed to working with adjacent states to assure mutual attainment of national standards.

In the event a development or issue arises that may impact performance or progress toward key milestones (including if a key milestone will be or has been missed and/or if a termination or modification has been requested), DHEC will notify all other signatories in writing as soon as possible.

DHEC will provide support to areas throughout the planning and implementation process by:

1. Developing emission inventories, modeling, trend analysis, and quantification and comparison of control measures.
2. Providing necessary information on all federal and state adopted emission reduction measures, which affect the area.
3. Providing technical and strategic assistance, as appropriate, in the selection and implementation of control strategies.
4. Providing technical and planning assistance in developing and implementing processes to address the impact of emissions growth beyond the attainment date.
5. Maintaining monitors and reporting and analysis of monitoring data.
6. Promoting public awareness efforts.
7. Coordinating communication between local areas and the EPA to facilitate continuing the EPA review of local work.
8. Ensuring expeditious review of local early action plan(s), and if deemed adequate, proposing modification of the early action SIP to adopt the early action plan.

9. Adopting control measures into the early action SIP as expeditiously as possible. The final complete early action SIP revision must be completed, adopted, and submitted by the state to the EPA by December 31, 2004.
10. Tracking progress. If any milestone is missed and EPA withdraws the deferred effective date, thereby triggering a non-attainment designation and applicable statutory requirements, the state will strive to submit a traditional non-attainment SIP within one year. However, due to the South Carolina legislative review process, it may take at least eighteen months.
11. Working concurrently with areas not electing to participate in the early action SIP process in preparing the traditional SIP submittal as required by the CAA.


## **V. The Environmental Protection Agency**

The EPA will participate by:


1. Recognizing the local area's and state's commitment to voluntarily adopt an early, substantive, enforceable, and scientifically-based attainment plan with early implementation of control measures by becoming a party to the EAC developed in conformance with South Carolina's Protocol for Early Action Compacts.
2. Providing technical assistance to the state(s) and local area(s) in the development of the early action plan.
3. Reviewing and approving the completed early action SIP by no later than September 30, 2005.
4. Deferring the effective date of non-attainment designation and related requirements for participating areas that fail to meet the 8-hour ozone standard as long as all terms and key milestones of the EAC are being met, including submission of the early action SIP revision by December 31, 2004.
5. Designating the area expeditiously as attainment and imposing no additional requirements, provided that the monitors in the area reflect attainment by December 31, 2007.
6. Taking action to withdraw the deferred effective date if the area violates the standard as of December 31, 2007, and the area has had the effective date of its non-attainment designation deferred. The area's non-attainment designation will become effective soon after.
7. Ensuring appropriate credit in the traditional SIP process for all emissions reductions from measures implemented in the early action SIP if the area does not meet all the terms of the EAC; including meeting agreed-upon key milestones and is designated (or re-designated if necessary) according to the EPA's 8-hour ozone implementation guidelines. The EPA will offer such an area no delays, exemptions, or other favorable treatment because of its participation in the EAC.

8. Not allowing any area to renew their EAC after December 31, 2007, or initiate a new compact if it has previously forfeited its participation.

VI. Signatures

  
United States Environmental Protection Agency

Regional Administrator 12-30-02  
Title Date

  
South Carolina  
Department of Health and Environmental Control

Deputy Commissioner 12/20/02  
Title Date

  
Spartanburg County Representative

County Administrator 12-10-02  
Title Date

# **Berkeley-Charleston-Dorchester Area**

## **Local Early Action Compacts**

**December 2002**



**SOUTH CAROLINA'S 8-HOUR OZONE  
EARLY ACTION COMPACT**  
Berkeley County

The United States Environmental Protection Agency (EPA) has provided an option for areas currently meeting the 1-hour ozone standard, like those in South Carolina, to attain the 8-hour ozone standard by December 31, 2007, and obtain cleaner air sooner than federally mandated. This option offers a more expeditious time line for achieving emissions reductions than expected under the EPA's 8-hour ozone implementation rulemaking, while providing "fail-safe" provisions for the area to revert to the traditional State Implementation Plan (SIP) process if specific milestones are not met. Through the development of this Early Action Compact (EAC), local, state, and EPA officials agree to work together to develop and implement local and state early action plans. The plans will become a part of the state early action SIP to reduce ground-level ozone concentrations to comply with the 8-hour ozone standard by December 31, 2007, and maintain the standard beyond that date. Failure to meet the obligations outlined in this EAC will result in immediate reversion to the traditional non-attainment designation process as required in the Clean Air Act (CAA).

In an effort to provide this information to areas within South Carolina, the South Carolina Department of Health and Environmental Control (DHEC) held six public meetings throughout the state. The locations of the meetings were targeted to areas that could potentially be designated as non-attainment for the 8-hour ozone standard. The meetings were held in Columbia, Greenville, Florence, Rock Hill, Aiken and Charleston. EPA officials participated in five of the six meetings. The general public, local government representatives, industry representatives, and environmental interest groups attended the meetings. Prior to the meetings, DHEC issued a press release regarding the development of an early action SIP. Correspondence including a fact sheet was sent to all county administrators, Councils of Governments, Metropolitan Planning Organizations, public interest groups, industry representatives, other state agencies and others determined to be stakeholders in the process.

The Parties to this EAC are: Berkeley County, South Carolina Department of Health and Environmental Control (DHEC) and EPA.

**I. General Provisions**

- A. The parties commit to develop, implement and maintain the early action SIP (which includes the local early action plans) providing EPA defers the effective date of the non-attainment designation and related requirements as long as all conditions of the EAC and key milestones are met.
- B. If the potential area of non-attainment does not meet all the terms of the EAC, then it will forfeit its participation and will be subject to the full planning requirements under applicable CAA

traditional SIP processes including requirements defined as part of the EPA's 8-hour ozone implementation rulemaking.

- C. If the area has had the effective date of a non-attainment designation deferred and the area does not reach attainment of the standard by December 31, 2007, then the non-attainment designation will be effective. If the EPA's implementation schedule also requires a traditional SIP from areas on or before December 31, 2007, then a traditional SIP revision demonstrating attainment by the new attainment date will be due for the non-attainment area no later than December 31, 2008.
- D. Before formal adoption into the early action SIP, this agreement may be modified or terminated by mutual consent of all parties, or any party may withdraw from the agreement by notifying other parties in writing. If a party's withdrawal from the agreement prevents remaining signatories from satisfying any of the terms and milestones of the original agreement, the agreement will be void, any deferred effective date of the non-attainment designation would be withdrawn and the area's non-attainment designation would become effective soon after. Upon termination or withdrawal from the EAC, the area will be subject to the full planning requirements under applicable CAA traditional processes including requirements defined as part of the EPA's 8-hour ozone implementation rulemaking. The local government signatories will approve the local early action plans before submittal to DHEC for inclusion in the early action SIP. Once the local early action plan is incorporated into the early action SIP, any modifications will be treated as SIP revisions.
- E. Execution of this EAC by each Party shall be by signature of each Party's authorized representative. This agreement remains in effect until December 31, 2007.

## II. **Early Action Compact Requirements**

- A. **Milestones and Reporting**  
DHEC and local areas will assess progress towards developing and implementing the early action SIP and make a report available to EPA and the public every six months beginning in June 2003. As per EPA guidance, the key milestones for participation in the EAC are identified in the following table.

<b>Local Plan /Early Action SIP Milestones</b>		
<b>DATE</b>	<b>MILESTONE</b>	<b>RESPONSIBILITY</b>
<b>December 31, 2002</b>	EAC signed by all parties and submitted to EPA	Local/State/EPA
<b>June 16, 2003</b>	Discussion of control measures being considered to EPA	Local/State
<b>March 31, 2004</b>	Final local early action plan submitted to DHEC; copy to EPA	Local
<b>December 31, 2004</b>	Early Action State Implementation Plan submitted to EPA for incorporation into SIP	State
<b>April 1, 2005</b>	Local/State control strategies implemented no later than this date	Local/State
<b>September 30, 2005</b>	EPA takes final action on SIP submitted December 31, 2004	EPA
<b>June 30, 2006</b>	State submits progress report to EPA	State
<b>December 31, 2007</b>	Attainment of the 8-hour ozone standard	Local/State

B. Emissions Inventories

1. DHEC will be responsible for developing emissions inventories.
2. An initial modeling emissions inventory will be completed by December 31, 2002. This inventory includes:
  - a. Emissions modeling data for a 1998 episode that is representative of a typical ozone season exceedance that meets the EPA episode selection guidance;
  - b. MOBILE6 for determining on-road mobile emissions;
  - c. NONROAD model data; and,
  - d. Area source database utilizing population data allocated statewide.
3. A 2007 future year modeling emissions inventory will be developed by March 31, 2004. This inventory will sufficiently account for projected future growth in ozone precursor emissions through 2007, particularly from stationary, non-road and on-road mobile sources.
4. Additional inventories will be contingent upon legislative appropriations or other funding. Selection of specific episode inventories will be partially determined by the conceptual model, which reflects an analysis of meteorological conditions typical of high ozone events.
5. Emissions inventories will be compared and analyzed for trends in emission sources over time. The emissions inventory comparison and analysis will be completed by December 31, 2003.

C. Modeling

1. DHEC will be responsible for conducting the meteorological and air quality modeling analysis. DHEC will conduct the modeling analysis based on the "Draft Guidance on the use of Models and Other Analyses in Attainment Demonstrations for the 8-Hour Ozone NAAQS" (EPA-454/R-99-004, May 1999). The modeling will follow the guidance as facilitated by the EPA Regional Office.
2. Base case modeling will be completed by December 31, 2002. Future case modeling will be completed by October 31, 2003. One or more modeled control cases will be completed by January 31, 2004, with final revisions completed by March 31, 2004. All modeling will:
  - be SIP quality and perform within EPA's accepted margin of accuracy;
  - be carefully documented;
  - sufficiently account for projected future growth in ozone precursor emissions;
  - be accomplished by DHEC and reviewed by EPA; and,
  - be used to determine the effectiveness of NO<sub>x</sub> and/or VOC reductions. The control case(s) will be used to determine the relative effectiveness of different emission reduction strategies and to aid in the selection of appropriate emission reduction strategies.

D. Control Strategies

1. All adopted Federal and State control strategies that have been or will be implemented by the December 31, 2007, attainment date will be included in base, future and control case modeling.
2. Additional local and state control strategies under consideration will be identified by June 16, 2003. The local and state control strategies selected will be implemented as soon as practical, but no later than April 1, 2005.
3. Local and state control strategies will be specific, quantified, permanent and enforceable. The strategies will also include specific implementation dates and detailed documentation and reporting processes.
4. Voluntary strategies can play a supporting role in the local early action plan and the early action SIP. If emission reductions from voluntary strategies are quantified and credit is taken for them in the local early action plan or the early action SIP, those emission reductions will be enforceable. Additional strategies must be implemented to meet those quantified reduction requirements if quantified voluntary strategies fail. This is true for all quantified emission reductions.
5. Local and state control strategies will be designed and implemented with full stakeholder participation.

6. Local and state control strategies will be incorporated by DHEC into the early action SIP. In the event that the local area desires to add, delete or substitute strategies after early action SIP submittal, the local area will request a modification. Local early action plan modifications will be treated as SIP revisions and facilitated by DHEC.

E. Maintenance for Growth

1. The early action SIP will include a component to address emissions growth at least five years beyond December 31, 2007, ensuring that the areas will remain in attainment of the 8-hour ozone standard during that period. Attainment maintenance analysis will be completed by January 31, 2004, with final revisions completed by March 31, 2004. The analysis will employ one or more of the following or any other appropriate techniques necessary to make such a demonstration:
  - a. Modeling analysis showing ozone levels below the 8-hour ozone standard in 2012;
  - b. An annual review of growth (especially mobile and stationary source) to ensure control measures and growth assumptions are adequate;
  - c. Identification and quantification of federal, state, and/or local measures indicating sufficient reductions to offset growth estimates; or,
  - d. Any other appropriate techniques necessary to make such a determination.
2. The early action SIP must also detail a continuing planning process that includes modeling updates and modeling assumption verification (particularly growth assumptions). Modeling updates and planning processes must consider and evaluate the following:
  - a. All relevant actual new point sources;
  - b. Impacts from potential new source growth; and,
  - c. Future transportation patterns and their impact on air quality in a manner that is consistent with the most current adopted Long Range Transportation Plan and most current trend and projections of local motor vehicle emissions.
3. If the review of emissions growth in conjunction with the continuing planning process demonstrates that adopted emission reduction strategies are inadequate to address growth in emissions, additional measures will be added to the early action plan. Local planning processes should prepare for this possibility.
4. In the event that the continuing planning process identifies the need to add, delete, or substitute control strategies after the local early action plan has been incorporated into the early action SIP, the local area will initiate, and DHEC will facilitate a SIP revision to accommodate changes.

**F. Public Involvement**

1. Public involvement has been and will continue to be strongly encouraged during the planning and implementation process.
2. Public awareness programs will be used to provide opportunities for involvement in the planning process, implementation of control strategies, and any other issues important to the area.
3. Interested stakeholders (i.e., local, state, and federal government, citizens, public interest groups, and the business community) will continue to be involved in the planning process as early as possible. Planning meetings will be open to the public, with posted meeting times and locations. Early action SIP drafts will be publicly available, and the drafting process will have sufficient opportunities for comment from all interested stakeholders.
4. Opportunities for public comment on the proposed early action SIP will be provided and will follow the traditional SIP revision process as implemented by DHEC.
5. Semi-annual reports detailing, at a minimum, progress toward key milestones, will be made available to the public.
6. DHEC has established and will maintain a website for South Carolina's Early Action Plan for the 8-hour ozone standard, located at [www.scdhec.net/baq/eap.html](http://www.scdhec.net/baq/eap.html).

**III. Local Government Responsibilities**

The local governments agree to develop and implement a local early action plan that will promote the area's attainment by December 31, 2007, of the 8-hour ozone standard and maintenance until at least 2012. The local governments will develop this plan in coordination with the DHEC, EPA, stakeholders and the public. The local early action plan will include a process to evaluate the effectiveness and maintain long-term compliance with the standard.

After all adopted Federal and State controls that have been or will be implemented by the attainment date of December 31, 2007, are accounted for in the modeling, the local area must adopt additional local controls, as necessary to demonstrate attainment of the 8-hour ozone standard by December 31, 2007. Local controls under consideration must be identified and described by June 16, 2003. These measures must be included in the semi-annual report made available to the public.

The draft local early action plan will be submitted to DHEC by August 31, 2003. The final local early action plan will be submitted to DHEC, with a copy forwarded to EPA, by March 31, 2004. The adopted local early action plan will be included in the early action SIP due December 31, 2004.

In the event a development or issue arises that may impact performance or progress toward key milestones (including if a key milestone will be or has been missed and/or if a termination or modification has been requested), the responsible party will notify all other signatories in writing as soon as possible.

#### **IV. The South Carolina Department of Health and Environmental Control**

DHEC agrees to develop and implement a state early action SIP that will demonstrate the participating area's attainment by December 31, 2007, of the 8-hour ozone standard and maintenance until at least 2012. DHEC will develop this plan in coordination with the local governments, EPA, stakeholders and the public. The state early action SIP will include a process to monitor and maintain long-term compliance with the standard.

It is the responsibility of each state under the CAA to ensure attainment with all National Ambient Air Quality Standards. At any such time that an area is deemed non-attainment, the state will be required to develop a plan to return the area(s) to attainment in accordance with the CAA. If applicable, South Carolina is committed to working with adjacent states to assure mutual attainment of national standards.

In the event a development or issue arises that may impact performance or progress toward key milestones (including if a key milestone will be or has been missed and/or if a termination or modification has been requested), DHEC will notify all other signatories in writing as soon as possible.

DHEC will provide support to areas throughout the planning and implementation process by:

1. Developing emission inventories, modeling, trend analysis, and quantification and comparison of control measures.
2. Providing necessary information on all federal and state adopted emission reduction measures, which affect the area.
3. Providing technical and strategic assistance, as appropriate, in the selection and implementation of control strategies.
4. Providing technical and planning assistance in developing and implementing processes to address the impact of emissions growth beyond the attainment date.
5. Maintaining monitors and reporting and analysis of monitoring data.
6. Promoting public awareness efforts.
7. Coordinating communication between local areas and the EPA to facilitate continuing the EPA review of local work.
8. Ensuring expeditious review of local early action plan(s), and if deemed adequate, proposing modification of the early action SIP to adopt the early action plan.

9. Adopting control measures into the early action SIP as expeditiously as possible. The final complete early action SIP revision must be completed, adopted, and submitted by the state to the EPA by December 31, 2004.
10. Tracking progress. If any milestone is missed and EPA withdraws the deferred effective date, thereby triggering a non-attainment designation and applicable statutory requirements, the state will strive to submit a traditional non-attainment SIP within one year. However, due to the South Carolina legislative review process, it may take at least eighteen months.
11. Working concurrently with areas not electing to participate in the early action SIP process in preparing the traditional SIP submittal as required by the CAA.

## **V. The Environmental Protection Agency**

The EPA will participate by:

1. Recognizing the local area's and state's commitment to voluntarily adopt an early, substantive, enforceable, and scientifically-based attainment plan with early implementation of control measures by becoming a party to the EAC developed in conformance with South Carolina's Protocol for Early Action Compacts.
2. Providing technical assistance to the state(s) and local area(s) in the development of the early action plan.
3. Reviewing and approving the completed early action SIP by no later than September 30, 2005.
4. Deferring the effective date of non-attainment designation and related requirements for participating areas that fail to meet the 8-hour ozone standard as long as all terms and key milestones of the EAC are being met, including submission of the early action SIP revision by December 31, 2004.
5. Designating the area expeditiously as attainment and imposing no additional requirements, provided that the monitors in the area reflect attainment by December 31, 2007.
6. Taking action to withdraw the deferred effective date if the area violates the standard as of December 31, 2007, and the area has had the effective date of its non-attainment designation deferred. The area's non-attainment designation will become effective soon after.
7. Ensuring appropriate credit in the traditional SIP process for all emissions reductions from measures implemented in the early action SIP if the area does not meet all the terms of the EAC; including meeting agreed-upon key milestones and is designated (or re-designated if necessary) according to the EPA's 8-hour ozone implementation guidelines. The EPA will offer such an area no delays, exemptions, or other favorable treatment because of its participation in the EAC.

8. Not allowing any area to renew their EAC after December 31, 2007, or initiate a new compact if it has previously forfeited its participation.

VI. Signatures

  
United States Environmental Protection Agency

Regional Administrator 12-30-02  
Title Date

R. Lenni Shaw  
South Carolina  
Department of Health and Environmental Control

Deputy Commissioner 12/27/02  
Title Date

  
Berkeley County Representative

County Supervisor December 20, 2002  
Title Date

**SOUTH CAROLINA'S 8-HOUR OZONE  
EARLY ACTION COMPACT  
Charleston County**

The United States Environmental Protection Agency (EPA) has provided an option for areas currently meeting the 1-hour ozone standard, like those in South Carolina, to attain the 8-hour ozone standard by December 31, 2007, and obtain cleaner air sooner than federally mandated. This option offers a more expeditious time line for achieving emissions reductions than expected under the EPA's 8-hour ozone implementation rulemaking, while providing "fail-safe" provisions for the area to revert to the traditional State Implementation Plan (SIP) process if specific milestones are not met. Through the development of this Early Action Compact (EAC), local, state, and EPA officials agree to work together to develop and implement local and state early action plans. The plans will become a part of the state early action SIP to reduce ground-level ozone concentrations to comply with the 8-hour ozone standard by December 31, 2007, and maintain the standard beyond that date. Failure to meet the obligations outlined in this EAC will result in immediate reversion to the traditional non-attainment designation process as required in the Clean Air Act (CAA).

In an effort to provide this information to areas within South Carolina, the South Carolina Department of Health and Environmental Control (DHEC) held six public meetings throughout the state. The locations of the meetings were targeted to areas that could potentially be designated as non-attainment for the 8-hour ozone standard. The meetings were held in Columbia, Greenville, Florence, Rock Hill, Aiken and Charleston. EPA officials participated in five of the six meetings. The general public, local government representatives, industry representatives, and environmental interest groups attended the meetings. Prior to the meetings, DHEC issued a press release regarding the development of an early action SIP. Correspondence including a fact sheet was sent to all county administrators, Councils of Governments, Metropolitan Planning Organizations, public interest groups, industry representatives, other state agencies and others determined to be stakeholders in the process.

The Parties to this (EAC) are: Charleston County, South Carolina Department of Health and Environmental Control (DHEC) and EPA.

**I. General Provisions**

- A. The parties commit to develop, implement and maintain the early action SIP (which includes the local early action plans) providing EPA defers the effective date of the non-attainment designation and related requirements as long as all conditions of the EAC and key milestones are met.
- B. If the potential area of non-attainment does not meet all the terms of the EAC, then it will forfeit its participation and will be subject to the full planning requirements under applicable CAA

traditional SIP processes including requirements defined as part of the EPA's 8-hour ozone implementation rulemaking.

- C. If the area has had the effective date of a non-attainment designation deferred and the area does not reach attainment of the standard by December 31, 2007, then the non-attainment designation will be effective. If the EPA's implementation schedule also requires a traditional SIP from areas on or before December 31, 2007, then a traditional SIP revision demonstrating attainment by the new attainment date will be due for the non-attainment area no later than December 31, 2008.
- D. Before formal adoption into the early action SIP, this agreement may be modified or terminated by mutual consent of all parties, or any party may withdraw from the agreement by notifying other parties in writing. If a party's withdrawal from the agreement prevents remaining signatories from satisfying any of the terms and milestones of the original agreement, the agreement will be void, any deferred effective date of the non-attainment designation would be withdrawn and the area's non-attainment designation would become effective soon after. Upon termination or withdrawal from the EAC, the area will be subject to the full planning requirements under applicable CAA traditional processes including requirements defined as part of the EPA's 8-hour ozone implementation rulemaking. The local government signatories will approve the local early action plans before submittal to DHEC for inclusion in the early action SIP. Once the local early action plan is incorporated into the early action SIP, any modifications will be treated as SIP revisions.
- E. Execution of this EAC by each Party shall be by signature of each Party's authorized representative. This agreement remains in effect until December 31, 2007.

## II. **Early Action Compact Requirements**

- A. **Milestones and Reporting**  
DHEC and local areas will assess progress towards developing and implementing the early action SIP and make a report available to EPA and the public every six months beginning in June 2003. As per EPA guidance, the key milestones for participation in the EAC are identified in the following table.

<b>Local Plan /Early Action SIP Milestones</b>		
<b>DATE</b>	<b>MILESTONE</b>	<b>RESPONSIBILITY</b>
<b>December 31, 2002</b>	EAC signed by all parties and submitted to EPA	Local/State/EPA
<b>June 16, 2003</b>	Discussion of control measures being considered to EPA	Local/State
<b>March 31, 2004</b>	Final local early action plan submitted to DHEC; copy to EPA	Local
<b>December 31, 2004</b>	Early Action State Implementation Plan submitted to EPA for incorporation into SIP	State
<b>April 1, 2005</b>	Local/State control strategies implemented no later than this date	Local/State
<b>September 30, 2005</b>	EPA takes final action on SIP submitted December 31, 2004	EPA
<b>June 30, 2006</b>	State submits progress report to EPA	State
<b>December 31, 2007</b>	Attainment of the 8-hour ozone standard	Local/State

B. Emissions Inventories

1. DHEC will be responsible for developing emissions inventories.
2. An initial modeling emissions inventory will be completed by December 31, 2002. This inventory includes:
  - a. Emissions modeling data for a 1998 episode that is representative of a typical ozone season exceedance that meets the EPA episode selection guidance;
  - b. MOBILE6 for determining on-road mobile emissions;
  - c. NONROAD model data; and,
  - d. Area source database utilizing population data allocated statewide.
3. A 2007 future year modeling emissions inventory will be developed by March 31, 2004. This inventory will sufficiently account for projected future growth in ozone precursor emissions through 2007, particularly from stationary, non-road and on-road mobile sources.
4. Additional inventories will be contingent upon legislative appropriations or other funding. Selection of specific episode inventories will be partially determined by the conceptual model, which reflects an analysis of meteorological conditions typical of high ozone events.
5. Emissions inventories will be compared and analyzed for trends in emission sources over time. The emissions inventory comparison and analysis will be completed by December 31, 2003.

C. Modeling

1. DHEC will be responsible for conducting the meteorological and air quality modeling analysis. DHEC will conduct the modeling analysis based on the "Draft Guidance on the use of Models and Other Analyses in Attainment Demonstrations for the 8-Hour Ozone NAAQS" (EPA-454/R-99-004, May 1999). The modeling will follow the guidance as facilitated by the EPA Regional Office.
2. Base case modeling will be completed by December 31, 2002. Future case modeling will be completed by October 31, 2003. One or more modeled control cases will be completed by January 31, 2004, with final revisions completed by March 31, 2004. All modeling will:
  - be SIP quality and perform within EPA's accepted margin of accuracy;
  - be carefully documented;
  - sufficiently account for projected future growth in ozone precursor emissions;
  - be accomplished by DHEC and reviewed by EPA; and,
  - be used to determine the effectiveness of NO<sub>x</sub> and/or VOC reductions. The control case(s) will be used to determine the relative effectiveness of different emission reduction strategies and to aid in the selection of appropriate emission reduction strategies.

D. Control Strategies

1. All adopted Federal and State control strategies that have been or will be implemented by the December 31, 2007, attainment date will be included in base, future and control case modeling.
2. Additional local and state control strategies under consideration will be identified by June 16, 2003. The local and state control strategies selected will be implemented as soon as practical, but no later than April 1, 2005.
3. Local and state control strategies will be specific, quantified, permanent and enforceable. The strategies will also include specific implementation dates and detailed documentation and reporting processes.
4. Voluntary strategies can play a supporting role in the local early action plan and the early action SIP. If emission reductions from voluntary strategies are quantified and credit is taken for them in the local early action plan or the early action SIP, those emission reductions will be enforceable. Additional strategies must be implemented to meet those quantified reduction requirements if quantified voluntary strategies fail. This is true for all quantified emission reductions.
5. Local and state control strategies will be designed and implemented with full stakeholder participation.

6. Local and state control strategies will be incorporated by DHEC into the early action SIP. In the event that the local area desires to add, delete or substitute strategies after early action SIP submittal, the local area will request a modification. Local early action plan modifications will be treated as SIP revisions and facilitated by DHEC.

E. Maintenance for Growth

1. The early action SIP will include a component to address emissions growth at least five years beyond December 31, 2007, ensuring that the areas will remain in attainment of the 8-hour ozone standard during that period. Attainment maintenance analysis will be completed by January 31, 2004, with final revisions completed by March 31, 2004. The analysis will employ one or more of the following or any other appropriate techniques necessary to make such a demonstration:
  - a. Modeling analysis showing ozone levels below the 8-hour ozone standard in 2012;
  - b. An annual review of growth (especially mobile and stationary source) to ensure control measures and growth assumptions are adequate;
  - c. Identification and quantification of federal, state, and/or local measures indicating sufficient reductions to offset growth estimates; or,
  - d. Any other appropriate techniques necessary to make such a determination.
2. The early action SIP must also detail a continuing planning process that includes modeling updates and modeling assumption verification (particularly growth assumptions). Modeling updates and planning processes must consider and evaluate the following:
  - a. All relevant actual new point sources;
  - b. Impacts from potential new source growth; and,
  - c. Future transportation patterns and their impact on air quality in a manner that is consistent with the most current adopted Long Range Transportation Plan and most current trend and projections of local motor vehicle emissions.
3. If the review of emissions growth in conjunction with the continuing planning process demonstrates that adopted emission reduction strategies are inadequate to address growth in emissions, additional measures will be added to the early action plan. Local planning processes should prepare for this possibility.
4. In the event that the continuing planning process identifies the need to add, delete, or substitute control strategies after the local early action plan has been incorporated into the early action SIP, the local area will initiate, and DHEC will facilitate a SIP revision to accommodate changes.

**F. Public Involvement**

1. Public involvement has been and will continue to be strongly encouraged during the planning and implementation process.
2. Public awareness programs will be used to provide opportunities for involvement in the planning process, implementation of control strategies, and any other issues important to the area.
3. Interested stakeholders (i.e., local, state, and federal government, citizens, public interest groups, and the business community) will continue to be involved in the planning process as early as possible. Planning meetings will be open to the public, with posted meeting times and locations. Early action SIP drafts will be publicly available, and the drafting process will have sufficient opportunities for comment from all interested stakeholders.
4. Opportunities for public comment on the proposed early action SIP will be provided and will follow the traditional SIP revision process as implemented by DHEC.
5. Semi-annual reports detailing, at a minimum, progress toward key milestones, will be made available to the public.
6. DHEC has established and will maintain a website for South Carolina's Early Action Plan for the 8-hour ozone standard, located at [www.scdhec.net/baq/eap.html](http://www.scdhec.net/baq/eap.html).

**III. Local Government Responsibilities**

The local governments agree to develop and implement a local early action plan that will promote the area's attainment by December 31, 2007, of the 8-hour ozone standard and maintenance until at least 2012. The local governments will develop this plan in coordination with the DHEC, EPA, stakeholders and the public. The local early action plan will include a process to evaluate the effectiveness and maintain long-term compliance with the standard.

After all adopted Federal and State controls that have been or will be implemented by the attainment date of December 31, 2007, are accounted for in the modeling, the local area must adopt additional local controls, as necessary to demonstrate attainment of the 8-hour ozone standard by December 31, 2007. Local controls under consideration must be identified and described by June 16, 2003. These measures must be included in the semi-annual report made available to the public.

The draft local early action plan will be submitted to DHEC by August 31, 2003. The final local early action plan will be submitted to DHEC, with a copy forwarded to EPA, by March 31, 2004. The adopted local early action plan will be included in the early action SIP due December 31, 2004.

In the event a development or issue arises that may impact performance or progress toward key milestones (including if a key milestone will be or has been missed and/or if a termination or modification has been requested), the responsible party will notify all other signatories in writing as soon as possible.

#### **IV. The South Carolina Department of Health and Environmental Control**

DHEC agrees to develop and implement a state early action SIP that will demonstrate the participating area's attainment by December 31, 2007, of the 8-hour ozone standard and maintenance until at least 2012. DHEC will develop this plan in coordination with the local governments, EPA, stakeholders and the public. The state early action SIP will include a process to monitor and maintain long-term compliance with the standard.

It is the responsibility of each state under the CAA to ensure attainment with all National Ambient Air Quality Standards. At any such time that an area is deemed non-attainment, the state will be required to develop a plan to return the area(s) to attainment in accordance with the CAA. If applicable, South Carolina is committed to working with adjacent states to assure mutual attainment of national standards.

In the event a development or issue arises that may impact performance or progress toward key milestones (including if a key milestone will be or has been missed and/or if a termination or modification has been requested), DHEC will notify all other signatories in writing as soon as possible.

DHEC will provide support to areas throughout the planning and implementation process by:

1. Developing emission inventories, modeling, trend analysis, and quantification and comparison of control measures.
2. Providing necessary information on all federal and state adopted emission reduction measures, which affect the area.
3. Providing technical and strategic assistance, as appropriate, in the selection and implementation of control strategies.
4. Providing technical and planning assistance in developing and implementing processes to address the impact of emissions growth beyond the attainment date.
5. Maintaining monitors and reporting and analysis of monitoring data.
6. Promoting public awareness efforts.
7. Coordinating communication between local areas and the EPA to facilitate continuing the EPA review of local work.
8. Ensuring expeditious review of local early action plan(s), and if deemed adequate, proposing modification of the early action SIP to adopt the early action plan.

9. Adopting control measures into the early action SIP as expeditiously as possible. The final complete early action SIP revision must be completed, adopted, and submitted by the state to the EPA by December 31, 2004.
10. Tracking progress. If any milestone is missed and EPA withdraws the deferred effective date, thereby triggering a non-attainment designation and applicable statutory requirements, the state will strive to submit a traditional non-attainment SIP within one year. However, due to the South Carolina legislative review process, it may take at least eighteen months.
11. Working concurrently with areas not electing to participate in the early action SIP process in preparing the traditional SIP submittal as required by the CAA.

## **V. The Environmental Protection Agency**

The EPA will participate by:

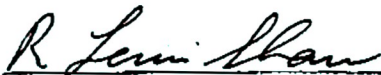
1. Recognizing the local area's and state's commitment to voluntarily adopt an early, substantive, enforceable, and scientifically-based attainment plan with early implementation of control measures by becoming a party to the EAC developed in conformance with South Carolina's Protocol for Early Action Compacts.
2. Providing technical assistance to the state(s) and local area(s) in the development of the early action plan.
3. Reviewing and approving the completed early action SIP by no later than September 30, 2005.
4. Deferring the effective date of non-attainment designation and related requirements for participating areas that fail to meet the 8-hour ozone standard as long as all terms and key milestones of the EAC are being met, including submission of the early action SIP revision by December 31, 2004.
5. Designating the area expeditiously as attainment and imposing no additional requirements, provided that the monitors in the area reflect attainment by December 31, 2007.
6. Taking action to withdraw the deferred effective date if the area violates the standard as of December 31, 2007, and the area has had the effective date of its non-attainment designation deferred. The area's non-attainment designation will become effective soon after.
7. Ensuring appropriate credit in the traditional SIP process for all emissions reductions from measures implemented in the early action SIP if the area does not meet all the terms of the EAC; including meeting agreed-upon key milestones and is designated (or re-designated if necessary) according to the EPA's 8-hour ozone implementation guidelines. The EPA will offer such an area no delays, exemptions, or other favorable treatment because of its participation in the EAC.

8. Not allowing any area to renew their EAC after December 31, 2007, or initiate a new compact if it has previously forfeited its participation.

VI. Signatures

  
United States Environmental Protection Agency

Regional Administrator 12-30-02  
Title Date

  
South Carolina  
Department of Health and Environmental Control

Deputy Commissioner 12/27/02  
Title Date

  
Charleston County Representative

County Administrator 12/23/02  
Title Date

**SOUTH CAROLINA'S 8-HOUR OZONE  
EARLY ACTION COMPACT**  
Dorchester County

The United States Environmental Protection Agency (EPA) has provided an option for areas currently meeting the 1-hour ozone standard, like those in South Carolina, to attain the 8-hour ozone standard by December 31, 2007, and obtain cleaner air sooner than federally mandated. This option offers a more expeditious time line for achieving emissions reductions than expected under the EPA's 8-hour ozone implementation rulemaking, while providing "fail-safe" provisions for the area to revert to the traditional State Implementation Plan (SIP) process if specific milestones are not met. Through the development of this Early Action Compact (EAC), local, state, and EPA officials agree to work together to develop and implement local and state early action plans. The plans will become a part of the state early action SIP to reduce ground-level ozone concentrations to comply with the 8-hour ozone standard by December 31, 2007, and maintain the standard beyond that date. Failure to meet the obligations outlined in this EAC will result in immediate reversion to the traditional non-attainment designation process as required in the Clean Air Act (CAA).

In an effort to provide this information to areas within South Carolina, the South Carolina Department of Health and Environmental Control (DHEC) held six public meetings throughout the state. The locations of the meetings were targeted to areas that could potentially be designated as non-attainment for the 8-hour ozone standard. The meetings were held in Columbia, Greenville, Florence, Rock Hill, Aiken and Charleston. EPA officials participated in five of the six meetings. The general public, local government representatives, industry representatives, and environmental interest groups attended the meetings. Prior to the meetings, DHEC issued a press release regarding the development of an early action SIP. Correspondence including a fact sheet was sent to all county administrators, Councils of Governments, Metropolitan Planning Organizations, public interest groups, industry representatives, other state agencies and others determined to be stakeholders in the process.

The Parties to this EAC are: Dorchester County, South Carolina Department of Health and Environmental Control (DHEC) and EPA.

**I. General Provisions**

- A. The parties commit to develop, implement and maintain the early action SIP (which includes the local early action plans) providing EPA defers the effective date of the non-attainment designation and related requirements as long as all conditions of the EAC and key milestones are met.
- B. If the potential area of non-attainment does not meet all the terms of the EAC, then it will forfeit its participation and will be subject to the full planning requirements under applicable CAA

traditional SIP processes including requirements defined as part of the EPA's 8-hour ozone implementation rulemaking.

- C. If the area has had the effective date of a non-attainment designation deferred and the area does not reach attainment of the standard by December 31, 2007, then the non-attainment designation will be effective. If the EPA's implementation schedule also requires a traditional SIP from areas on or before December 31, 2007, then a traditional SIP revision demonstrating attainment by the new attainment date will be due for the non-attainment area no later than December 31, 2008.
- D. Before formal adoption into the early action SIP, this agreement may be modified or terminated by mutual consent of all parties, or any party may withdraw from the agreement by notifying other parties in writing. If a party's withdrawal from the agreement prevents remaining signatories from satisfying any of the terms and milestones of the original agreement, the agreement will be void, any deferred effective date of the non-attainment designation would be withdrawn and the area's non-attainment designation would become effective soon after. Upon termination or withdrawal from the EAC, the area will be subject to the full planning requirements under applicable CAA traditional processes including requirements defined as part of the EPA's 8-hour ozone implementation rulemaking. The local government signatories will approve the local early action plans before submittal to DHEC for inclusion in the early action SIP. Once the local early action plan is incorporated into the early action SIP, any modifications will be treated as SIP revisions.
- E. Execution of this EAC by each Party shall be by signature of each Party's authorized representative. This agreement remains in effect until December 31, 2007.

## II. **Early Action Compact Requirements**

- A. **Milestones and Reporting**  
DHEC and local areas will assess progress towards developing and implementing the early action SIP and make a report available to EPA and the public every six months beginning in June 2003. As per EPA guidance, the key milestones for participation in the EAC are identified in the following table.

<b>Local Plan /Early Action SIP Milestones</b>		
<b>DATE</b>	<b>MILESTONE</b>	<b>RESPONSIBILITY</b>
<b>December 31, 2002</b>	EAC signed by all parties and submitted to EPA	Local/State/EPA
<b>June 16, 2003</b>	Discussion of control measures being considered to EPA	Local/State
<b>March 31, 2004</b>	Final local early action plan submitted to DHEC; copy to EPA	Local
<b>December 31, 2004</b>	Early Action State Implementation Plan submitted to EPA for incorporation into SIP	State
<b>April 1, 2005</b>	Local/State control strategies implemented no later than this date	Local/State
<b>September 30, 2005</b>	EPA takes final action on SIP submitted December 31, 2004	EPA
<b>June 30, 2006</b>	State submits progress report to EPA	State
<b>December 31, 2007</b>	Attainment of the 8-hour ozone standard	Local/State

B. Emissions Inventories

1. DHEC will be responsible for developing emissions inventories.
2. An initial modeling emissions inventory will be completed by December 31, 2002. This inventory includes:
  - a. Emissions modeling data for a 1998 episode that is representative of a typical ozone season exceedance that meets the EPA episode selection guidance;
  - b. MOBILE6 for determining on-road mobile emissions;
  - c. NONROAD model data; and,
  - d. Area source database utilizing population data allocated statewide.
3. A 2007 future year modeling emissions inventory will be developed by March 31, 2004. This inventory will sufficiently account for projected future growth in ozone precursor emissions through 2007, particularly from stationary, non-road and on-road mobile sources.
4. Additional inventories will be contingent upon legislative appropriations or other funding. Selection of specific episode inventories will be partially determined by the conceptual model, which reflects an analysis of meteorological conditions typical of high ozone events.
5. Emissions inventories will be compared and analyzed for trends in emission sources over time. The emissions inventory comparison and analysis will be completed by December 31, 2003.

C. Modeling

1. DHEC will be responsible for conducting the meteorological and air quality modeling analysis. DHEC will conduct the modeling analysis based on the "Draft Guidance on the use of Models and Other Analyses in Attainment Demonstrations for the 8-Hour Ozone NAAQS" (EPA-454/R-99-004, May 1999). The modeling will follow the guidance as facilitated by the EPA Regional Office.
2. Base case modeling will be completed by December 31, 2002. Future case modeling will be completed by October 31, 2003. One or more modeled control cases will be completed by January 31, 2004, with final revisions completed by March 31, 2004. All modeling will:
  - be SIP quality and perform within EPA's accepted margin of accuracy;
  - be carefully documented;
  - sufficiently account for projected future growth in ozone precursor emissions;
  - be accomplished by DHEC and reviewed by EPA; and,
  - be used to determine the effectiveness of NO<sub>x</sub> and/or VOC reductions. The control case(s) will be used to determine the relative effectiveness of different emission reduction strategies and to aid in the selection of appropriate emission reduction strategies.

D. Control Strategies

1. All adopted Federal and State control strategies that have been or will be implemented by the December 31, 2007, attainment date will be included in base, future and control case modeling.
2. Additional local and state control strategies under consideration will be identified by June 16, 2003. The local and state control strategies selected will be implemented as soon as practical, but no later than April 1, 2005.
3. Local and state control strategies will be specific, quantified, permanent and enforceable. The strategies will also include specific implementation dates and detailed documentation and reporting processes.
4. Voluntary strategies can play a supporting role in the local early action plan and the early action SIP. If emission reductions from voluntary strategies are quantified and credit is taken for them in the local early action plan or the early action SIP, those emission reductions will be enforceable. Additional strategies must be implemented to meet those quantified reduction requirements if quantified voluntary strategies fail. This is true for all quantified emission reductions.
5. Local and state control strategies will be designed and implemented with full stakeholder participation.

6. Local and state control strategies will be incorporated by DHEC into the early action SIP. In the event that the local area desires to add, delete or substitute strategies after early action SIP submittal, the local area will request a modification. Local early action plan modifications will be treated as SIP revisions and facilitated by DHEC.

E. Maintenance for Growth

1. The early action SIP will include a component to address emissions growth at least five years beyond December 31, 2007, ensuring that the areas will remain in attainment of the 8-hour ozone standard during that period. Attainment maintenance analysis will be completed by January 31, 2004, with final revisions completed by March 31, 2004. The analysis will employ one or more of the following or any other appropriate techniques necessary to make such a demonstration:
  - a. Modeling analysis showing ozone levels below the 8-hour ozone standard in 2012;
  - b. An annual review of growth (especially mobile and stationary source) to ensure control measures and growth assumptions are adequate;
  - c. Identification and quantification of federal, state, and/or local measures indicating sufficient reductions to offset growth estimates; or,
  - d. Any other appropriate techniques necessary to make such a determination.
2. The early action SIP must also detail a continuing planning process that includes modeling updates and modeling assumption verification (particularly growth assumptions). Modeling updates and planning processes must consider and evaluate the following:
  - a. All relevant actual new point sources;
  - b. Impacts from potential new source growth; and,
  - c. Future transportation patterns and their impact on air quality in a manner that is consistent with the most current adopted Long Range Transportation Plan and most current trend and projections of local motor vehicle emissions.
3. If the review of emissions growth in conjunction with the continuing planning process demonstrates that adopted emission reduction strategies are inadequate to address growth in emissions, additional measures will be added to the early action plan. Local planning processes should prepare for this possibility.
4. In the event that the continuing planning process identifies the need to add, delete, or substitute control strategies after the local early action plan has been incorporated into the early action SIP, the local area will initiate, and DHEC will facilitate a SIP revision to accommodate changes.

**F. Public Involvement**

1. Public involvement has been and will continue to be strongly encouraged during the planning and implementation process.
2. Public awareness programs will be used to provide opportunities for involvement in the planning process, implementation of control strategies, and any other issues important to the area.
3. Interested stakeholders (i.e., local, state, and federal government, citizens, public interest groups, and the business community) will continue to be involved in the planning process as early as possible. Planning meetings will be open to the public, with posted meeting times and locations. Early action SIP drafts will be publicly available, and the drafting process will have sufficient opportunities for comment from all interested stakeholders.
4. Opportunities for public comment on the proposed early action SIP will be provided and will follow the traditional SIP revision process as implemented by DHEC.
5. Semi-annual reports detailing, at a minimum, progress toward key milestones, will be made available to the public.
6. DHEC has established and will maintain a website for South Carolina's Early Action Plan for the 8-hour ozone standard, located at [www.scdhec.net/baq/eap.html](http://www.scdhec.net/baq/eap.html).

**III. Local Government Responsibilities**

The local governments agree to develop and implement a local early action plan that will promote the area's attainment by December 31, 2007, of the 8-hour ozone standard and maintenance until at least 2012. The local governments will develop this plan in coordination with the DHEC, EPA, stakeholders and the public. The local early action plan will include a process to evaluate the effectiveness and maintain long-term compliance with the standard.

After all adopted Federal and State controls that have been or will be implemented by the attainment date of December 31, 2007, are accounted for in the modeling, the local area must adopt additional local controls, as necessary to demonstrate attainment of the 8-hour ozone standard by December 31, 2007. Local controls under consideration must be identified and described by June 16, 2003. These measures must be included in the semi-annual report made available to the public.

The draft local early action plan will be submitted to DHEC by August 31, 2003. The final local early action plan will be submitted to DHEC, with a copy forwarded to EPA, by March 31, 2004. The adopted local early action plan will be included in the early action SIP due December 31, 2004.

In the event a development or issue arises that may impact performance or progress toward key milestones (including if a key milestone will be or has been missed and/or if a termination or modification has been requested), the responsible party will notify all other signatories in writing as soon as possible.

#### **IV. The South Carolina Department of Health and Environmental Control**

DHEC agrees to develop and implement a state early action SIP that will demonstrate the participating area's attainment by December 31, 2007, of the 8-hour ozone standard and maintenance until at least 2012. DHEC will develop this plan in coordination with the local governments, EPA, stakeholders and the public. The state early action SIP will include a process to monitor and maintain long-term compliance with the standard.

It is the responsibility of each state under the CAA to ensure attainment with all National Ambient Air Quality Standards. At any such time that an area is deemed non-attainment, the state will be required to develop a plan to return the area(s) to attainment in accordance with the CAA. If applicable, South Carolina is committed to working with adjacent states to assure mutual attainment of national standards.

In the event a development or issue arises that may impact performance or progress toward key milestones (including if a key milestone will be or has been missed and/or if a termination or modification has been requested), DHEC will notify all other signatories in writing as soon as possible.

DHEC will provide support to areas throughout the planning and implementation process by:

1. Developing emission inventories, modeling, trend analysis, and quantification and comparison of control measures.
2. Providing necessary information on all federal and state adopted emission reduction measures, which affect the area.
3. Providing technical and strategic assistance, as appropriate, in the selection and implementation of control strategies.
4. Providing technical and planning assistance in developing and implementing processes to address the impact of emissions growth beyond the attainment date.
5. Maintaining monitors and reporting and analysis of monitoring data.
6. Promoting public awareness efforts.
7. Coordinating communication between local areas and the EPA to facilitate continuing the EPA review of local work.
8. Ensuring expeditious review of local early action plan(s), and if deemed adequate, proposing modification of the early action SIP to adopt the early action plan.

9. Adopting control measures into the early action SIP as expeditiously as possible. The final complete early action SIP revision must be completed, adopted, and submitted by the state to the EPA by December 31, 2004.
10. Tracking progress. If any milestone is missed and EPA withdraws the deferred effective date, thereby triggering a non-attainment designation and applicable statutory requirements, the state will strive to submit a traditional non-attainment SIP within one year. However, due to the South Carolina legislative review process, it may take at least eighteen months.
11. Working concurrently with areas not electing to participate in the early action SIP process in preparing the traditional SIP submittal as required by the CAA.

## **V. The Environmental Protection Agency**

The EPA will participate by:

1. Recognizing the local area's and state's commitment to voluntarily adopt an early, substantive, enforceable, and scientifically-based attainment plan with early implementation of control measures by becoming a party to the EAC developed in conformance with South Carolina's Protocol for Early Action Compacts.
2. Providing technical assistance to the state(s) and local area(s) in the development of the early action plan.
3. Reviewing and approving the completed early action SIP by no later than September 30, 2005.
4. Deferring the effective date of non-attainment designation and related requirements for participating areas that fail to meet the 8-hour ozone standard as long as all terms and key milestones of the EAC are being met, including submission of the early action SIP revision by December 31, 2004.
5. Designating the area expeditiously as attainment and imposing no additional requirements, provided that the monitors in the area reflect attainment by December 31, 2007.
6. Taking action to withdraw the deferred effective date if the area violates the standard as of December 31, 2007, and the area has had the effective date of its non-attainment designation deferred. The area's non-attainment designation will become effective soon after.
7. Ensuring appropriate credit in the traditional SIP process for all emissions reductions from measures implemented in the early action SIP if the area does not meet all the terms of the EAC; including meeting agreed-upon key milestones and is designated (or re-designated if necessary) according to the EPA's 8-hour ozone implementation guidelines. The EPA will offer such an area no delays, exemptions, or other favorable treatment because of its participation in the EAC.

8. Not allowing any area to renew their EAC after December 31, 2007, or initiate a new compact if it has previously forfeited its participation.

VI. Signatures

  
United States Environmental Protection Agency

Regional Administrator 12-30-02  
Title Date

R. Lenn Shaw  
South Carolina  
Department of Health and Environmental Control

Deputy Commissioner 12/27/02  
Title Date

  
Dorchester County Representative

Administrator 12/20/02  
Title Date

## **Catawba Area**

## **Local Early Action Compacts**

**December 2002**



**SOUTH CAROLINA'S 8-HOUR OZONE  
EARLY ACTION COMPACT  
Chester County**

The United States Environmental Protection Agency (EPA) has provided an option for areas currently meeting the 1-hour ozone standard, like those in South Carolina, to attain the 8-hour ozone standard by December 31, 2007, and obtain cleaner air sooner than federally mandated. This option offers a more expeditious time line for achieving emissions reductions than expected under the EPA's 8-hour ozone implementation rulemaking, while providing "fail-safe" provisions for the area to revert to the traditional State Implementation Plan (SIP) process if specific milestones are not met. Through the development of this Early Action Compact (EAC), local, state, and EPA officials agree to work together to develop and implement local and state early action plans. The plans will become a part of the state early action SIP to reduce ground-level ozone concentrations to comply with the 8-hour ozone standard by December 31, 2007, and maintain the standard beyond that date. Failure to meet the obligations outlined in this EAC will result in immediate reversion to the traditional non-attainment designation process as required in the Clean Air Act (CAA).

In an effort to provide this information to areas within South Carolina, the South Carolina Department of Health and Environmental Control (DHEC) held six public meetings throughout the state. The locations of the meetings were targeted to areas that could potentially be designated as non-attainment for the 8-hour ozone standard. The meetings were held in Columbia, Greenville, Florence, Rock Hill, Aiken and Charleston. EPA officials participated in five of the six meetings. The general public, local government representatives, industry representatives, and environmental interest groups attended the meetings. Prior to the meetings, DHEC issued a press release regarding the development of an early action SIP. Correspondence including a fact sheet was sent to all county administrators, Councils of Governments, Metropolitan Planning Organizations, public interest groups, industry representatives, other state agencies and others determined to be stakeholders in the process.

The Parties to this (EAC) are: Chester County, South Carolina Department of Health and Environmental Control (DHEC) and EPA.

**I. General Provisions**

- A. The parties commit to develop, implement and maintain the early action SIP (which includes the local early action plans) providing EPA defers the effective date of the non-attainment designation and related requirements as long as all conditions of the EAC and key milestones are met.
- B. If the potential area of non-attainment does not meet all the terms of the EAC, then it will forfeit its participation and will be subject to the full planning requirements under applicable CAA

traditional SIP processes including requirements defined as part of the EPA's 8-hour ozone implementation rulemaking.

- C. If the area has had the effective date of a non-attainment designation deferred and the area does not reach attainment of the standard by December 31, 2007, then the non-attainment designation will be effective. If the EPA's implementation schedule also requires a traditional SIP from areas on or before December 31, 2007, then a traditional SIP revision demonstrating attainment by the new attainment date will be due for the non-attainment area no later than December 31, 2008.
- D. Before formal adoption into the early action SIP, this agreement may be modified or terminated by mutual consent of all parties, or any party may withdraw from the agreement by notifying other parties in writing. If a party's withdrawal from the agreement prevents remaining signatories from satisfying any of the terms and milestones of the original agreement, the agreement will be void, any deferred effective date of the non-attainment designation would be withdrawn and the area's non-attainment designation would become effective soon after. Upon termination or withdrawal from the EAC, the area will be subject to the full planning requirements under applicable CAA traditional processes including requirements defined as part of the EPA's 8-hour ozone implementation rulemaking. The local government signatories will approve the local early action plans before submittal to DHEC for inclusion in the early action SIP. Once the local early action plan is incorporated into the early action SIP, any modifications will be treated as SIP revisions.
- E. Execution of this EAC by each Party shall be by signature of each Party's authorized representative. This agreement remains in effect until December 31, 2007.

## II. **Early Action Compact Requirements**

- A. **Milestones and Reporting**  
DHEC and local areas will assess progress towards developing and implementing the early action SIP and make a report available to EPA and the public every six months beginning in June 2003. As per EPA guidance, the key milestones for participation in the EAC are identified in the following table.

<b>Local Plan /Early Action SIP Milestones</b>		
<b>DATE</b>	<b>MILESTONE</b>	<b>RESPONSIBILITY</b>
<b>December 31, 2002</b>	EAC signed by all parties and submitted to EPA	Local/State/EPA
<b>June 16, 2003</b>	Discussion of control measures being considered to EPA	Local/State
<b>March 31, 2004</b>	Final local early action plan submitted to DHEC; copy to EPA	Local
<b>December 31, 2004</b>	Early Action State Implementation Plan submitted to EPA for incorporation into SIP	State
<b>April 1, 2005</b>	Local/State control strategies implemented no later than this date	Local/State
<b>September 30, 2005</b>	EPA takes final action on SIP submitted December 31, 2004	EPA
<b>June 30, 2006</b>	State submits progress report to EPA	State
<b>December 31, 2007</b>	Attainment of the 8-hour ozone standard	Local/State

B. Emissions Inventories

1. DHEC will be responsible for developing emissions inventories.
2. An initial modeling emissions inventory will be completed by December 31, 2002. This inventory includes:
  - a. Emissions modeling data for a 1998 episode that is representative of a typical ozone season exceedance that meets the EPA episode selection guidance;
  - b. MOBILE6 for determining on-road mobile emissions;
  - c. NONROAD model data; and,
  - d. Area source database utilizing population data allocated statewide.
3. A 2007 future year modeling emissions inventory will be developed by March 31, 2004. This inventory will sufficiently account for projected future growth in ozone precursor emissions through 2007, particularly from stationary, non-road and on-road mobile sources.
4. Additional inventories will be contingent upon legislative appropriations or other funding. Selection of specific episode inventories will be partially determined by the conceptual model, which reflects an analysis of meteorological conditions typical of high ozone events.
5. Emissions inventories will be compared and analyzed for trends in emission sources over time. The emissions inventory comparison and analysis will be completed by December 31, 2003.

C. Modeling

1. DHEC will be responsible for conducting the meteorological and air quality modeling analysis. DHEC will conduct the modeling analysis based on the "Draft Guidance on the use of Models and Other Analyses in Attainment Demonstrations for the 8-Hour Ozone NAAQS" (EPA-454/R-99-004, May 1999). The modeling will follow the guidance as facilitated by the EPA Regional Office.
2. Base case modeling will be completed by December 31, 2002. Future case modeling will be completed by October 31, 2003. One or more modeled control cases will be completed by January 31, 2004, with final revisions completed by March 31, 2004. All modeling will:
  - be SIP quality and perform within EPA's accepted margin of accuracy;
  - be carefully documented;
  - sufficiently account for projected future growth in ozone precursor emissions;
  - be accomplished by DHEC and reviewed by EPA; and,
  - be used to determine the effectiveness of NO<sub>x</sub> and/or VOC reductions. The control case(s) will be used to determine the relative effectiveness of different emission reduction strategies and to aid in the selection of appropriate emission reduction strategies.

D. Control Strategies

1. All adopted Federal and State control strategies that have been or will be implemented by the December 31, 2007, attainment date will be included in base, future and control case modeling.
2. Additional local and state control strategies under consideration will be identified by June 16, 2003. The local and state control strategies selected will be implemented as soon as practical, but no later than April 1, 2005.
3. Local and state control strategies will be specific, quantified, permanent and enforceable. The strategies will also include specific implementation dates and detailed documentation and reporting processes.
4. Voluntary strategies can play a supporting role in the local early action plan and the early action SIP. If emission reductions from voluntary strategies are quantified and credit is taken for them in the local early action plan or the early action SIP, those emission reductions will be enforceable. Additional strategies must be implemented to meet those quantified reduction requirements if quantified voluntary strategies fail. This is true for all quantified emission reductions.
5. Local and state control strategies will be designed and implemented with full stakeholder participation.

6. Local and state control strategies will be incorporated by DHEC into the early action SIP. In the event that the local area desires to add, delete or substitute strategies after early action SIP submittal, the local area will request a modification. Local early action plan modifications will be treated as SIP revisions and facilitated by DHEC.

E. Maintenance for Growth

1. The early action SIP will include a component to address emissions growth at least five years beyond December 31, 2007, ensuring that the areas will remain in attainment of the 8-hour ozone standard during that period. Attainment maintenance analysis will be completed by January 31, 2004, with final revisions completed by March 31, 2004. The analysis will employ one or more of the following or any other appropriate techniques necessary to make such a demonstration:
  - a. Modeling analysis showing ozone levels below the 8-hour ozone standard in 2012;
  - b. An annual review of growth (especially mobile and stationary source) to ensure control measures and growth assumptions are adequate;
  - c. Identification and quantification of federal, state, and/or local measures indicating sufficient reductions to offset growth estimates; or,
  - d. Any other appropriate techniques necessary to make such a determination.
2. The early action SIP must also detail a continuing planning process that includes modeling updates and modeling assumption verification (particularly growth assumptions). Modeling updates and planning processes must consider and evaluate the following:
  - a. All relevant actual new point sources;
  - b. Impacts from potential new source growth; and,
  - c. Future transportation patterns and their impact on air quality in a manner that is consistent with the most current adopted Long Range Transportation Plan and most current trend and projections of local motor vehicle emissions.
3. If the review of emissions growth in conjunction with the continuing planning process demonstrates that adopted emission reduction strategies are inadequate to address growth in emissions, additional measures will be added to the early action plan. Local planning processes should prepare for this possibility.
4. In the event that the continuing planning process identifies the need to add, delete, or substitute control strategies after the local early action plan has been incorporated into the early action SIP, the local area will initiate, and DHEC will facilitate a SIP revision to accommodate changes.

**F. Public Involvement**

1. Public involvement has been and will continue to be strongly encouraged during the planning and implementation process.
2. Public awareness programs will be used to provide opportunities for involvement in the planning process, implementation of control strategies, and any other issues important to the area.
3. Interested stakeholders (i.e., local, state, and federal government, citizens, public interest groups, and the business community) will continue to be involved in the planning process as early as possible. Planning meetings will be open to the public, with posted meeting times and locations. Early action SIP drafts will be publicly available, and the drafting process will have sufficient opportunities for comment from all interested stakeholders.
4. Opportunities for public comment on the proposed early action SIP will be provided and will follow the traditional SIP revision process as implemented by DHEC.
5. Semi-annual reports detailing, at a minimum, progress toward key milestones, will be made available to the public.
6. DHEC has established and will maintain a website for South Carolina's Early Action Plan for the 8-hour ozone standard, located at [www.scdhec.net/baq/eap.html](http://www.scdhec.net/baq/eap.html).

**III. Local Government Responsibilities**

The local governments agree to develop and implement a local early action plan that will promote the area's attainment by December 31, 2007, of the 8-hour ozone standard and maintenance until at least 2012. The local governments will develop this plan in coordination with the DHEC, EPA, stakeholders and the public. The local early action plan will include a process to evaluate the effectiveness and maintain long-term compliance with the standard.

After all adopted Federal and State controls that have been or will be implemented by the attainment date of December 31, 2007, are accounted for in the modeling, the local area must adopt additional local controls, as necessary to demonstrate attainment of the 8-hour ozone standard by December 31, 2007. Local controls under consideration must be identified and described by June 16, 2003. These measures must be included in the semi-annual report made available to the public.

The draft local early action plan will be submitted to DHEC by August 31, 2003. The final local early action plan will be submitted to DHEC, with a copy forwarded to EPA, by March 31, 2004. The adopted local early action plan will be included in the early action SIP due December 31, 2004.

In the event a development or issue arises that may impact performance or progress toward key milestones (including if a key milestone will be or has been missed and/or if a termination or modification has been requested), the responsible party will notify all other signatories in writing as soon as possible.

#### **IV. The South Carolina Department of Health and Environmental Control**

DHEC agrees to develop and implement a state early action SIP that will demonstrate the participating area's attainment by December 31, 2007, of the 8-hour ozone standard and maintenance until at least 2012. DHEC will develop this plan in coordination with the local governments, EPA, stakeholders and the public. The state early action SIP will include a process to monitor and maintain long-term compliance with the standard.

It is the responsibility of each state under the CAA to ensure attainment with all National Ambient Air Quality Standards. At any such time that an area is deemed non-attainment, the state will be required to develop a plan to return the area(s) to attainment in accordance with the CAA. If applicable, South Carolina is committed to working with adjacent states to assure mutual attainment of national standards.

In the event a development or issue arises that may impact performance or progress toward key milestones (including if a key milestone will be or has been missed and/or if a termination or modification has been requested), DHEC will notify all other signatories in writing as soon as possible.

DHEC will provide support to areas throughout the planning and implementation process by:

1. Developing emission inventories, modeling, trend analysis, and quantification and comparison of control measures.
2. Providing necessary information on all federal and state adopted emission reduction measures, which affect the area.
3. Providing technical and strategic assistance, as appropriate, in the selection and implementation of control strategies.
4. Providing technical and planning assistance in developing and implementing processes to address the impact of emissions growth beyond the attainment date.
5. Maintaining monitors and reporting and analysis of monitoring data.
6. Promoting public awareness efforts.
7. Coordinating communication between local areas and the EPA to facilitate continuing the EPA review of local work.
8. Ensuring expeditious review of local early action plan(s), and if deemed adequate, proposing modification of the early action SIP to adopt the early action plan.

9. Adopting control measures into the early action SIP as expeditiously as possible. The final complete early action SIP revision must be completed, adopted, and submitted by the state to the EPA by December 31, 2004.
10. Tracking progress. If any milestone is missed and EPA withdraws the deferred effective date, thereby triggering a non-attainment designation and applicable statutory requirements, the state will strive to submit a traditional non-attainment SIP within one year. However, due to the South Carolina legislative review process, it may take at least eighteen months.
11. Working concurrently with areas not electing to participate in the early action SIP process in preparing the traditional SIP submittal as required by the CAA.

## **V. The Environmental Protection Agency**

The EPA will participate by:

1. Recognizing the local area's and state's commitment to voluntarily adopt an early, substantive, enforceable, and scientifically-based attainment plan with early implementation of control measures by becoming a party to the EAC developed in conformance with South Carolina's Protocol for Early Action Compacts.
2. Providing technical assistance to the state(s) and local area(s) in the development of the early action plan.
3. Reviewing and approving the completed early action SIP by no later than September 30, 2005.
4. Deferring the effective date of non-attainment designation and related requirements for participating areas that fail to meet the 8-hour ozone standard as long as all terms and key milestones of the EAC are being met, including submission of the early action SIP revision by December 31, 2004.
5. Designating the area expeditiously as attainment and imposing no additional requirements, provided that the monitors in the area reflect attainment by December 31, 2007.
6. Taking action to withdraw the deferred effective date if the area violates the standard as of December 31, 2007, and the area has had the effective date of its non-attainment designation deferred. The area's non-attainment designation will become effective soon after.
7. Ensuring appropriate credit in the traditional SIP process for all emissions reductions from measures implemented in the early action SIP if the area does not meet all the terms of the EAC; including meeting agreed-upon key milestones and is designated (or re-designated if necessary) according to the EPA's 8-hour ozone implementation guidelines. The EPA will offer such an area no delays, exemptions, or other favorable treatment because of its participation in the EAC.

8. Not allowing any area to renew their EAC after December 31, 2007, or initiate a new compact if it has previously forfeited its participation.

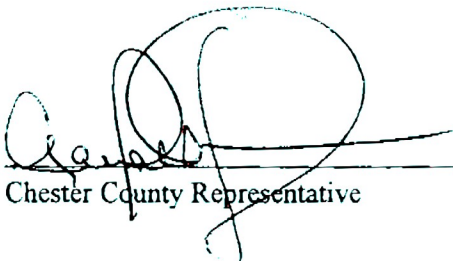
VI. Signatures

  
United States Environmental Protection Agency

Regional Administrator 12-31-02  
Title Date

R. Lenn Shaw  
South Carolina  
Department of Health and Environmental Control

Deputy Commissioner 12/20/02  
Title Date

  
Chester County Representative

Asst County Manager 12/17/02  
Title Date

**SOUTH CAROLINA'S 8-HOUR OZONE  
EARLY ACTION COMPACT  
Lancaster County**

The United States Environmental Protection Agency (EPA) has provided an option for areas currently meeting the 1-hour ozone standard, like those in South Carolina, to attain the 8-hour ozone standard by December 31, 2007, and obtain cleaner air sooner than federally mandated. This option offers a more expeditious time line for achieving emissions reductions than expected under the EPA's 8-hour ozone implementation rulemaking, while providing "fail-safe" provisions for the area to revert to the traditional State Implementation Plan (SIP) process if specific milestones are not met. Through the development of this Early Action Compact (EAC), local, state, and EPA officials agree to work together to develop and implement local and state early action plans. The plans will become a part of the state early action SIP to reduce ground-level ozone concentrations to comply with the 8-hour ozone standard by December 31, 2007, and maintain the standard beyond that date. Failure to meet the obligations outlined in this EAC will result in immediate reversion to the traditional non-attainment designation process as required in the Clean Air Act (CAA).

In an effort to provide this information to areas within South Carolina, the South Carolina Department of Health and Environmental Control (DHEC) held six public meetings throughout the state. The locations of the meetings were targeted to areas that could potentially be designated as non-attainment for the 8-hour ozone standard. The meetings were held in Columbia, Greenville, Florence, Rock Hill, Aiken and Charleston. EPA officials participated in five of the six meetings. The general public, local government representatives, industry representatives, and environmental interest groups attended the meetings. Prior to the meetings, DHEC issued a press release regarding the development of an early action SIP. Correspondence including a fact sheet was sent to all county administrators, Councils of Governments, Metropolitan Planning Organizations, public interest groups, industry representatives, other state agencies and others determined to be stakeholders in the process.

The Parties to this (EAC) are: Lancaster County, South Carolina Department of Health and Environmental Control (DHEC) and EPA.

**I. General Provisions**

- A. The parties commit to develop, implement and maintain the early action SIP (which includes the local early action plans) providing EPA defers the effective date of the non-attainment designation and related requirements as long as all conditions of the EAC and key milestones are met.
- B. If the potential area of non-attainment does not meet all the terms of the EAC, then it will forfeit its participation and will be subject to the full planning requirements under applicable CAA

traditional SIP processes including requirements defined as part of the EPA's 8-hour ozone implementation rulemaking.

- C. If the area has had the effective date of a non-attainment designation deferred and the area does not reach attainment of the standard by December 31, 2007, then the non-attainment designation will be effective. If the EPA's implementation schedule also requires a traditional SIP from areas on or before December 31, 2007, then a traditional SIP revision demonstrating attainment by the new attainment date will be due for the non-attainment area no later than December 31, 2008.
- D. Before formal adoption into the early action SIP, this agreement may be modified or terminated by mutual consent of all parties, or any party may withdraw from the agreement by notifying other parties in writing. If a party's withdrawal from the agreement prevents remaining signatories from satisfying any of the terms and milestones of the original agreement, the agreement will be void, any deferred effective date of the non-attainment designation would be withdrawn and the area's non-attainment designation would become effective soon after. Upon termination or withdrawal from the EAC, the area will be subject to the full planning requirements under applicable CAA traditional processes including requirements defined as part of the EPA's 8-hour ozone implementation rulemaking. The local government signatories will approve the local early action plans before submittal to DHEC for inclusion in the early action SIP. Once the local early action plan is incorporated into the early action SIP, any modifications will be treated as SIP revisions.
- E. Execution of this EAC by each Party shall be by signature of each Party's authorized representative. This agreement remains in effect until December 31, 2007.

## II. **Early Action Compact Requirements**

- A. **Milestones and Reporting**  
DHEC and local areas will assess progress towards developing and implementing the early action SIP and make a report available to EPA and the public every six months beginning in June 2003. As per EPA guidance, the key milestones for participation in the EAC are identified in the following table.

<b>Local Plan /Early Action SIP Milestones</b>		
<b>DATE</b>	<b>MILESTONE</b>	<b>RESPONSIBILITY</b>
<b>December 31, 2002</b>	EAC signed by all parties and submitted to EPA	Local/State/EPA
<b>June 16, 2003</b>	Discussion of control measures being considered to EPA	Local/State
<b>March 31, 2004</b>	Final local early action plan submitted to DHEC; copy to EPA	Local
<b>December 31, 2004</b>	Early Action State Implementation Plan submitted to EPA for incorporation into SIP	State
<b>April 1, 2005</b>	Local/State control strategies implemented no later than this date	Local/State
<b>September 30, 2005</b>	EPA takes final action on SIP submitted December 31, 2004	EPA
<b>June 30, 2006</b>	State submits progress report to EPA	State
<b>December 31, 2007</b>	Attainment of the 8-hour ozone standard	Local/State

B. Emissions Inventories

1. DHEC will be responsible for developing emissions inventories.
2. An initial modeling emissions inventory will be completed by December 31, 2002. This inventory includes:
  - a. Emissions modeling data for a 1998 episode that is representative of a typical ozone season exceedance that meets the EPA episode selection guidance;
  - b. MOBILE6 for determining on-road mobile emissions;
  - c. NONROAD model data; and,
  - d. Area source database utilizing population data allocated statewide.
3. A 2007 future year modeling emissions inventory will be developed by March 31, 2004. This inventory will sufficiently account for projected future growth in ozone precursor emissions through 2007, particularly from stationary, non-road and on-road mobile sources.
4. Additional inventories will be contingent upon legislative appropriations or other funding. Selection of specific episode inventories will be partially determined by the conceptual model, which reflects an analysis of meteorological conditions typical of high ozone events.
5. Emissions inventories will be compared and analyzed for trends in emission sources over time. The emissions inventory comparison and analysis will be completed by December 31, 2003.

C. Modeling

1. DHEC will be responsible for conducting the meteorological and air quality modeling analysis. DHEC will conduct the modeling analysis based on the "Draft Guidance on the use of Models and Other Analyses in Attainment Demonstrations for the 8-Hour Ozone NAAQS" (EPA-454/R-99-004, May 1999). The modeling will follow the guidance as facilitated by the EPA Regional Office.
2. Base case modeling will be completed by December 31, 2002. Future case modeling will be completed by October 31, 2003. One or more modeled control cases will be completed by January 31, 2004, with final revisions completed by March 31, 2004. All modeling will:
  - be SIP quality and perform within EPA's accepted margin of accuracy;
  - be carefully documented;
  - sufficiently account for projected future growth in ozone precursor emissions;
  - be accomplished by DHEC and reviewed by EPA; and,
  - be used to determine the effectiveness of NO<sub>x</sub> and/or VOC reductions. The control case(s) will be used to determine the relative effectiveness of different emission reduction strategies and to aid in the selection of appropriate emission reduction strategies.

D. Control Strategies

1. All adopted Federal and State control strategies that have been or will be implemented by the December 31, 2007, attainment date will be included in base, future and control case modeling.
2. Additional local and state control strategies under consideration will be identified by June 16, 2003. The local and state control strategies selected will be implemented as soon as practical, but no later than April 1, 2005.
3. Local and state control strategies will be specific, quantified, permanent and enforceable. The strategies will also include specific implementation dates and detailed documentation and reporting processes.
4. Voluntary strategies can play a supporting role in the local early action plan and the early action SIP. If emission reductions from voluntary strategies are quantified and credit is taken for them in the local early action plan or the early action SIP, those emission reductions will be enforceable. Additional strategies must be implemented to meet those quantified reduction requirements if quantified voluntary strategies fail. This is true for all quantified emission reductions.
5. Local and state control strategies will be designed and implemented with full stakeholder participation.

6. Local and state control strategies will be incorporated by DHEC into the early action SIP. In the event that the local area desires to add, delete or substitute strategies after early action SIP submittal, the local area will request a modification. Local early action plan modifications will be treated as SIP revisions and facilitated by DHEC.

E. Maintenance for Growth

1. The early action SIP will include a component to address emissions growth at least five years beyond December 31, 2007, ensuring that the areas will remain in attainment of the 8-hour ozone standard during that period. Attainment maintenance analysis will be completed by January 31, 2004, with final revisions completed by March 31, 2004. The analysis will employ one or more of the following or any other appropriate techniques necessary to make such a demonstration:
  - a. Modeling analysis showing ozone levels below the 8-hour ozone standard in 2012;
  - b. An annual review of growth (especially mobile and stationary source) to ensure control measures and growth assumptions are adequate;
  - c. Identification and quantification of federal, state, and/or local measures indicating sufficient reductions to offset growth estimates; or,
  - d. Any other appropriate techniques necessary to make such a determination.
2. The early action SIP must also detail a continuing planning process that includes modeling updates and modeling assumption verification (particularly growth assumptions). Modeling updates and planning processes must consider and evaluate the following:
  - a. All relevant actual new point sources;
  - b. Impacts from potential new source growth; and,
  - c. Future transportation patterns and their impact on air quality in a manner that is consistent with the most current adopted Long Range Transportation Plan and most current trend and projections of local motor vehicle emissions.
3. If the review of emissions growth in conjunction with the continuing planning process demonstrates that adopted emission reduction strategies are inadequate to address growth in emissions, additional measures will be added to the early action plan. Local planning processes should prepare for this possibility.
4. In the event that the continuing planning process identifies the need to add, delete, or substitute control strategies after the local early action plan has been incorporated into the early action SIP, the local area will initiate, and DHEC will facilitate a SIP revision to accommodate changes.

F. Public Involvement

1. Public involvement has been and will continue to be strongly encouraged during the planning and implementation process.
2. Public awareness programs will be used to provide opportunities for involvement in the planning process, implementation of control strategies, and any other issues important to the area.
3. Interested stakeholders (i.e., local, state, and federal government, citizens, public interest groups, and the business community) will continue to be involved in the planning process as early as possible. Planning meetings will be open to the public, with posted meeting times and locations. Early action SIP drafts will be publicly available, and the drafting process will have sufficient opportunities for comment from all interested stakeholders.
4. Opportunities for public comment on the proposed early action SIP will be provided and will follow the traditional SIP revision process as implemented by DHEC.
5. Semi-annual reports detailing, at a minimum, progress toward key milestones, will be made available to the public.
6. DHEC has established and will maintain a website for South Carolina's Early Action Plan for the 8-hour ozone standard, located at [www.scdhec.net/baq/eap.html](http://www.scdhec.net/baq/eap.html).

**III. Local Government Responsibilities**

The local governments agree to develop and implement a local early action plan that will promote the area's attainment by December 31, 2007, of the 8-hour ozone standard and maintenance until at least 2012. The local governments will develop this plan in coordination with the DHEC, EPA, stakeholders and the public. The local early action plan will include a process to evaluate the effectiveness and maintain long-term compliance with the standard.

After all adopted Federal and State controls that have been or will be implemented by the attainment date of December 31, 2007, are accounted for in the modeling, the local area must adopt additional local controls, as necessary to demonstrate attainment of the 8-hour ozone standard by December 31, 2007. Local controls under consideration must be identified and described by June 16, 2003. These measures must be included in the semi-annual report made available to the public.

The draft local early action plan will be submitted to DHEC by August 31, 2003. The final local early action plan will be submitted to DHEC, with a copy forwarded to EPA, by March 31, 2004. The adopted local early action plan will be included in the early action SIP due December 31, 2004.

In the event a development or issue arises that may impact performance or progress toward key milestones (including if a key milestone will be or has been missed and/or if a termination or modification has been requested), the responsible party will notify all other signatories in writing as soon as possible.

#### **IV. The South Carolina Department of Health and Environmental Control**

DHEC agrees to develop and implement a state early action SIP that will demonstrate the participating area's attainment by December 31, 2007, of the 8-hour ozone standard and maintenance until at least 2012. DHEC will develop this plan in coordination with the local governments, EPA, stakeholders and the public. The state early action SIP will include a process to monitor and maintain long-term compliance with the standard.

It is the responsibility of each state under the CAA to ensure attainment with all National Ambient Air Quality Standards. At any such time that an area is deemed non-attainment, the state will be required to develop a plan to return the area(s) to attainment in accordance with the CAA. If applicable, South Carolina is committed to working with adjacent states to assure mutual attainment of national standards.

In the event a development or issue arises that may impact performance or progress toward key milestones (including if a key milestone will be or has been missed and/or if a termination or modification has been requested), DHEC will notify all other signatories in writing as soon as possible.

DHEC will provide support to areas throughout the planning and implementation process by:

1. Developing emission inventories, modeling, trend analysis, and quantification and comparison of control measures.
2. Providing necessary information on all federal and state adopted emission reduction measures, which affect the area.
3. Providing technical and strategic assistance, as appropriate, in the selection and implementation of control strategies.
4. Providing technical and planning assistance in developing and implementing processes to address the impact of emissions growth beyond the attainment date.
5. Maintaining monitors and reporting and analysis of monitoring data.
6. Promoting public awareness efforts.
7. Coordinating communication between local areas and the EPA to facilitate continuing the EPA review of local work.
8. Ensuring expeditious review of local early action plan(s), and if deemed adequate, proposing modification of the early action SIP to adopt the early action plan.

9. Adopting control measures into the early action SIP as expeditiously as possible. The final complete early action SIP revision must be completed, adopted, and submitted by the state to the EPA by December 31, 2004.
10. Tracking progress. If any milestone is missed and EPA withdraws the deferred effective date, thereby triggering a non-attainment designation and applicable statutory requirements, the state will strive to submit a traditional non-attainment SIP within one year. However, due to the South Carolina legislative review process, it may take at least eighteen months.
11. Working concurrently with areas not electing to participate in the early action SIP process in preparing the traditional SIP submittal as required by the CAA.

## **V. The Environmental Protection Agency**

The EPA will participate by:

1. Recognizing the local area's and state's commitment to voluntarily adopt an early, substantive, enforceable, and scientifically-based attainment plan with early implementation of control measures by becoming a party to the EAC developed in conformance with South Carolina's Protocol for Early Action Compacts.
2. Providing technical assistance to the state(s) and local area(s) in the development of the early action plan.
3. Reviewing and approving the completed early action SIP by no later than September 30, 2005.
4. Deferring the effective date of non-attainment designation and related requirements for participating areas that fail to meet the 8-hour ozone standard as long as all terms and key milestones of the EAC are being met, including submission of the early action SIP revision by December 31, 2004.
5. Designating the area expeditiously as attainment and imposing no additional requirements, provided that the monitors in the area reflect attainment by December 31, 2007.
6. Taking action to withdraw the deferred effective date if the area violates the standard as of December 31, 2007, and the area has had the effective date of its non-attainment designation deferred. The area's non-attainment designation will become effective soon after.
7. Ensuring appropriate credit in the traditional SIP process for all emissions reductions from measures implemented in the early action SIP if the area does not meet all the terms of the EAC; including meeting agreed-upon key milestones and is designated (or re-designated if necessary) according to the EPA's 8-hour ozone implementation guidelines. The EPA will offer such an area no delays, exemptions, or other favorable treatment because of its participation in the EAC.

8. Not allowing any area to renew their EAC after December 31, 2007, or initiate a new compact if it has previously forfeited its participation.

**VI. Signatures**

  
United States Environmental Protection Agency

Regional Administrator 12-31-02  
Title Date

R. Lewis Shan  
South Carolina  
Department of Health and Environmental Control

Deputy Commissioner 12/20/02  
Title Date

Patty C. Jackson  
Lancaster County Representative

Chair 12-11-02  
Title Date

**SOUTH CAROLINA'S 8-HOUR OZONE  
EARLY ACTION COMPACT  
Union County**

The United States Environmental Protection Agency (EPA) has provided an option for areas currently meeting the 1-hour ozone standard, like those in South Carolina, to attain the 8-hour ozone standard by December 31, 2007, and obtain cleaner air sooner than federally mandated. This option offers a more expeditious time line for achieving emissions reductions than expected under the EPA's 8-hour ozone implementation rulemaking, while providing "fail-safe" provisions for the area to revert to the traditional State Implementation Plan (SIP) process if specific milestones are not met. Through the development of this Early Action Compact (EAC), local, state, and EPA officials agree to work together to develop and implement local and state early action plans. The plans will become a part of the state early action SIP to reduce ground-level ozone concentrations to comply with the 8-hour ozone standard by December 31, 2007, and maintain the standard beyond that date. Failure to meet the obligations outlined in this EAC will result in immediate reversion to the traditional non-attainment designation process as required in the Clean Air Act (CAA).

In an effort to provide this information to areas within South Carolina, the South Carolina Department of Health and Environmental Control (DHEC) held six public meetings throughout the state. The locations of the meetings were targeted to areas that could potentially be designated as non-attainment for the 8-hour ozone standard. The meetings were held in Columbia, Greenville, Florence, Rock Hill, Aiken and Charleston. EPA officials participated in five of the six meetings. The general public, local government representatives, industry representatives, and environmental interest groups attended the meetings. Prior to the meetings, DHEC issued a press release regarding the development of an early action SIP. Correspondence including a fact sheet was sent to all county administrators, Councils of Governments, Metropolitan Planning Organizations, public interest groups, industry representatives, other state agencies and others determined to be stakeholders in the process.

The Parties to this (EAC) are: Union County, South Carolina Department of Health and Environmental Control (DHEC) and EPA.

**I. General Provisions**

- A. The parties commit to develop, implement and maintain the early action SIP (which includes the local early action plans) providing EPA defers the effective date of the non-attainment designation and related requirements as long as all conditions of the EAC and key milestones are met.
- B. If the potential area of non-attainment does not meet all the terms of the EAC, then it will forfeit its participation and will be subject to the full planning requirements under applicable CAA

traditional SIP processes including requirements defined as part of the EPA's 8-hour ozone implementation rulemaking.

- C. If the area has had the effective date of a non-attainment designation deferred and the area does not reach attainment of the standard by December 31, 2007, then the non-attainment designation will be effective. If the EPA's implementation schedule also requires a traditional SIP from areas on or before December 31, 2007, then a traditional SIP revision demonstrating attainment by the new attainment date will be due for the non-attainment area no later than December 31, 2008.
- D. Before formal adoption into the early action SIP, this agreement may be modified or terminated by mutual consent of all parties, or any party may withdraw from the agreement by notifying other parties in writing. If a party's withdrawal from the agreement prevents remaining signatories from satisfying any of the terms and milestones of the original agreement, the agreement will be void, any deferred effective date of the non-attainment designation would be withdrawn and the area's non-attainment designation would become effective soon after. Upon termination or withdrawal from the EAC, the area will be subject to the full planning requirements under applicable CAA traditional processes including requirements defined as part of the EPA's 8-hour ozone implementation rulemaking. The local government signatories will approve the local early action plans before submittal to DHEC for inclusion in the early action SIP. Once the local early action plan is incorporated into the early action SIP, any modifications will be treated as SIP revisions.
- E. Execution of this EAC by each Party shall be by signature of each Party's authorized representative. This agreement remains in effect until December 31, 2007.

## II. **Early Action Compact Requirements**

- A. **Milestones and Reporting**  
DHEC and local areas will assess progress towards developing and implementing the early action SIP and make a report available to EPA and the public every six months beginning in June 2003. As per EPA guidance, the key milestones for participation in the EAC are identified in the following table.

<b>Local Plan /Early Action SIP Milestones</b>		
<b>DATE</b>	<b>MILESTONE</b>	<b>RESPONSIBILITY</b>
<b>December 31, 2002</b>	EAC signed by all parties and submitted to EPA	Local/State/EPA
<b>June 16, 2003</b>	Discussion of control measures being considered to EPA	Local/State
<b>March 31, 2004</b>	Final local early action plan submitted to DHEC; copy to EPA	Local
<b>December 31, 2004</b>	Early Action State Implementation Plan submitted to EPA for incorporation into SIP	State
<b>April 1, 2005</b>	Local/State control strategies implemented no later than this date	Local/State
<b>September 30, 2005</b>	EPA takes final action on SIP submitted December 31, 2004	EPA
<b>June 30, 2006</b>	State submits progress report to EPA	State
<b>December 31, 2007</b>	Attainment of the 8-hour ozone standard	Local/State

B. Emissions Inventories

1. DHEC will be responsible for developing emissions inventories.
2. An initial modeling emissions inventory will be completed by December 31, 2002. This inventory includes:
  - a. Emissions modeling data for a 1998 episode that is representative of a typical ozone season exceedance that meets the EPA episode selection guidance;
  - b. MOBILE6 for determining on-road mobile emissions;
  - c. NONROAD model data; and,
  - d. Area source database utilizing population data allocated statewide.
3. A 2007 future year modeling emissions inventory will be developed by March 31, 2004. This inventory will sufficiently account for projected future growth in ozone precursor emissions through 2007, particularly from stationary, non-road and on-road mobile sources.
4. Additional inventories will be contingent upon legislative appropriations or other funding. Selection of specific episode inventories will be partially determined by the conceptual model, which reflects an analysis of meteorological conditions typical of high ozone events.
5. Emissions inventories will be compared and analyzed for trends in emission sources over time. The emissions inventory comparison and analysis will be completed by December 31, 2003.

C. Modeling

1. DHEC will be responsible for conducting the meteorological and air quality modeling analysis. DHEC will conduct the modeling analysis based on the "Draft Guidance on the use of Models and Other Analyses in Attainment Demonstrations for the 8-Hour Ozone NAAQS" (EPA-454/R-99-004, May 1999). The modeling will follow the guidance as facilitated by the EPA Regional Office.
2. Base case modeling will be completed by December 31, 2002. Future case modeling will be completed by October 31, 2003. One or more modeled control cases will be completed by January 31, 2004, with final revisions completed by March 31, 2004. All modeling will:
  - be SIP quality and perform within EPA's accepted margin of accuracy;
  - be carefully documented;
  - sufficiently account for projected future growth in ozone precursor emissions;
  - be accomplished by DHEC and reviewed by EPA; and,
  - be used to determine the effectiveness of NO<sub>x</sub> and/or VOC reductions. The control case(s) will be used to determine the relative effectiveness of different emission reduction strategies and to aid in the selection of appropriate emission reduction strategies.

D. Control Strategies

1. All adopted Federal and State control strategies that have been or will be implemented by the December 31, 2007, attainment date will be included in base, future and control case modeling.
2. Additional local and state control strategies under consideration will be identified by June 16, 2003. The local and state control strategies selected will be implemented as soon as practical, but no later than April 1, 2005.
3. Local and state control strategies will be specific, quantified, permanent and enforceable. The strategies will also include specific implementation dates and detailed documentation and reporting processes.
4. Voluntary strategies can play a supporting role in the local early action plan and the early action SIP. If emission reductions from voluntary strategies are quantified and credit is taken for them in the local early action plan or the early action SIP, those emission reductions will be enforceable. Additional strategies must be implemented to meet those quantified reduction requirements if quantified voluntary strategies fail. This is true for all quantified emission reductions.
5. Local and state control strategies will be designed and implemented with full stakeholder participation.

6. Local and state control strategies will be incorporated by DHEC into the early action SIP. In the event that the local area desires to add, delete or substitute strategies after early action SIP submittal, the local area will request a modification. Local early action plan modifications will be treated as SIP revisions and facilitated by DHEC.

E. Maintenance for Growth

1. The early action SIP will include a component to address emissions growth at least five years beyond December 31, 2007, ensuring that the areas will remain in attainment of the 8-hour ozone standard during that period. Attainment maintenance analysis will be completed by January 31, 2004, with final revisions completed by March 31, 2004. The analysis will employ one or more of the following or any other appropriate techniques necessary to make such a demonstration:
  - a. Modeling analysis showing ozone levels below the 8-hour ozone standard in 2012;
  - b. An annual review of growth (especially mobile and stationary source) to ensure control measures and growth assumptions are adequate;
  - c. Identification and quantification of federal, state, and/or local measures indicating sufficient reductions to offset growth estimates; or,
  - d. Any other appropriate techniques necessary to make such a determination.
2. The early action SIP must also detail a continuing planning process that includes modeling updates and modeling assumption verification (particularly growth assumptions). Modeling updates and planning processes must consider and evaluate the following:
  - a. All relevant actual new point sources;
  - b. Impacts from potential new source growth; and,
  - c. Future transportation patterns and their impact on air quality in a manner that is consistent with the most current adopted Long Range Transportation Plan and most current trend and projections of local motor vehicle emissions.
3. If the review of emissions growth in conjunction with the continuing planning process demonstrates that adopted emission reduction strategies are inadequate to address growth in emissions, additional measures will be added to the early action plan. Local planning processes should prepare for this possibility.
4. In the event that the continuing planning process identifies the need to add, delete, or substitute control strategies after the local early action plan has been incorporated into the early action SIP, the local area will initiate, and DHEC will facilitate a SIP revision to accommodate changes.

**F. Public Involvement**

1. Public involvement has been and will continue to be strongly encouraged during the planning and implementation process.
2. Public awareness programs will be used to provide opportunities for involvement in the planning process, implementation of control strategies, and any other issues important to the area.
3. Interested stakeholders (i.e., local, state, and federal government, citizens, public interest groups, and the business community) will continue to be involved in the planning process as early as possible. Planning meetings will be open to the public, with posted meeting times and locations. Early action SIP drafts will be publicly available, and the drafting process will have sufficient opportunities for comment from all interested stakeholders.
4. Opportunities for public comment on the proposed early action SIP will be provided and will follow the traditional SIP revision process as implemented by DHEC.
5. Semi-annual reports detailing, at a minimum, progress toward key milestones, will be made available to the public.
6. DHEC has established and will maintain a website for South Carolina's Early Action Plan for the 8-hour ozone standard, located at [www.scdhec.net/baq/eap.html](http://www.scdhec.net/baq/eap.html).

**III. Local Government Responsibilities**

The local governments agree to develop and implement a local early action plan that will promote the area's attainment by December 31, 2007, of the 8-hour ozone standard and maintenance until at least 2012. The local governments will develop this plan in coordination with the DHEC, EPA, stakeholders and the public. The local early action plan will include a process to evaluate the effectiveness and maintain long-term compliance with the standard.

After all adopted Federal and State controls that have been or will be implemented by the attainment date of December 31, 2007, are accounted for in the modeling, the local area must adopt additional local controls, as necessary to demonstrate attainment of the 8-hour ozone standard by December 31, 2007. Local controls under consideration must be identified and described by June 16, 2003. These measures must be included in the semi-annual report made available to the public.

The draft local early action plan will be submitted to DHEC by August 31, 2003. The final local early action plan will be submitted to DHEC, with a copy forwarded to EPA, by March 31, 2004. The adopted local early action plan will be included in the early action SIP due December 31, 2004.

In the event a development or issue arises that may impact performance or progress toward key milestones (including if a key milestone will be or has been missed and/or if a termination or modification has been requested), the responsible party will notify all other signatories in writing as soon as possible.

#### **IV. The South Carolina Department of Health and Environmental Control**

DHEC agrees to develop and implement a state early action SIP that will demonstrate the participating area's attainment by December 31, 2007, of the 8-hour ozone standard and maintenance until at least 2012. DHEC will develop this plan in coordination with the local governments, EPA, stakeholders and the public. The state early action SIP will include a process to monitor and maintain long-term compliance with the standard.

It is the responsibility of each state under the CAA to ensure attainment with all National Ambient Air Quality Standards. At any such time that an area is deemed non-attainment, the state will be required to develop a plan to return the area(s) to attainment in accordance with the CAA. If applicable, South Carolina is committed to working with adjacent states to assure mutual attainment of national standards.

In the event a development or issue arises that may impact performance or progress toward key milestones (including if a key milestone will be or has been missed and/or if a termination or modification has been requested), DHEC will notify all other signatories in writing as soon as possible.

DHEC will provide support to areas throughout the planning and implementation process by:

1. Developing emission inventories, modeling, trend analysis, and quantification and comparison of control measures.
2. Providing necessary information on all federal and state adopted emission reduction measures, which affect the area.
3. Providing technical and strategic assistance, as appropriate, in the selection and implementation of control strategies.
4. Providing technical and planning assistance in developing and implementing processes to address the impact of emissions growth beyond the attainment date.
5. Maintaining monitors and reporting and analysis of monitoring data.
6. Promoting public awareness efforts.
7. Coordinating communication between local areas and the EPA to facilitate continuing the EPA review of local work.
8. Ensuring expeditious review of local early action plan(s), and if deemed adequate, proposing modification of the early action SIP to adopt the early action plan.

9. Adopting control measures into the early action SIP as expeditiously as possible. The final complete early action SIP revision must be completed, adopted, and submitted by the state to the EPA by December 31, 2004.
10. Tracking progress. If any milestone is missed and EPA withdraws the deferred effective date, thereby triggering a non-attainment designation and applicable statutory requirements, the state will strive to submit a traditional non-attainment SIP within one year. However, due to the South Carolina legislative review process, it may take at least eighteen months.
11. Working concurrently with areas not electing to participate in the early action SIP process in preparing the traditional SIP submittal as required by the CAA.

## **V. The Environmental Protection Agency**

The EPA will participate by:

1. Recognizing the local area's and state's commitment to voluntarily adopt an early, substantive, enforceable, and scientifically-based attainment plan with early implementation of control measures by becoming a party to the EAC developed in conformance with South Carolina's Protocol for Early Action Compacts.
2. Providing technical assistance to the state(s) and local area(s) in the development of the early action plan.
3. Reviewing and approving the completed early action SIP by no later than September 30, 2005.
4. Deferring the effective date of non-attainment designation and related requirements for participating areas that fail to meet the 8-hour ozone standard as long as all terms and key milestones of the EAC are being met, including submission of the early action SIP revision by December 31, 2004.
5. Designating the area expeditiously as attainment and imposing no additional requirements, provided that the monitors in the area reflect attainment by December 31, 2007.
6. Taking action to withdraw the deferred effective date if the area violates the standard as of December 31, 2007, and the area has had the effective date of its non-attainment designation deferred. The area's non-attainment designation will become effective soon after.
7. Ensuring appropriate credit in the traditional SIP process for all emissions reductions from measures implemented in the early action SIP if the area does not meet all the terms of the EAC; including meeting agreed-upon key milestones and is designated (or re-designated if necessary) according to the EPA's 8-hour ozone implementation guidelines. The EPA will offer such an area no delays, exemptions, or other favorable treatment because of its participation in the EAC.

8. Not allowing any area to renew their EAC after December 31, 2007, or initiate a new compact if it has previously forfeited its participation.

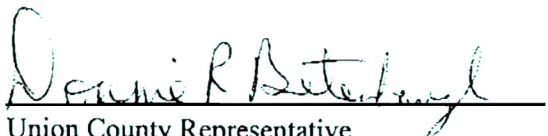
VI. Signatures

  
United States Environmental Protection Agency

Regional Administrator 12-31-02  
Title Date

R. Linnihan  
South Carolina  
Department of Health and Environmental Control

Deputy Commissioner 12/20/02  
Title Date

  
Union County Representative

Union County Supervisor 12-10-02  
Title Date

**SOUTH CAROLINA'S 8-HOUR OZONE  
EARLY ACTION COMPACT  
York County**

The United States Environmental Protection Agency (EPA) has provided an option for areas currently meeting the 1-hour ozone standard, like those in South Carolina, to attain the 8-hour ozone standard by December 31, 2007, and obtain cleaner air sooner than federally mandated. This option offers a more expeditious time line for achieving emissions reductions than expected under the EPA's 8-hour ozone implementation rulemaking, while providing "fail-safe" provisions for the area to revert to the traditional State Implementation Plan (SIP) process if specific milestones are not met. Through the development of this Early Action Compact (EAC), local, state, and EPA officials agree to work together to develop and implement local and state early action plans. The plans will become a part of the state early action SIP to reduce ground-level ozone concentrations to comply with the 8-hour ozone standard by December 31, 2007, and maintain the standard beyond that date. Failure to meet the obligations outlined in this EAC will result in immediate reversion to the traditional non-attainment designation process as required in the Clean Air Act (CAA).

In an effort to provide this information to areas within South Carolina, the South Carolina Department of Health and Environmental Control (DHEC) held six public meetings throughout the state. The locations of the meetings were targeted to areas that could potentially be designated as non-attainment for the 8-hour ozone standard. The meetings were held in Columbia, Greenville, Florence, Rock Hill, Aiken and Charleston. EPA officials participated in five of the six meetings. The general public, local government representatives, industry representatives, and environmental interest groups attended the meetings. Prior to the meetings, DHEC issued a press release regarding the development of an early action SIP. Correspondence including a fact sheet was sent to all county administrators, Councils of Governments, Metropolitan Planning Organizations, public interest groups, industry representatives, other state agencies and others determined to be stakeholders in the process.

The Parties to this (EAC) are: York County, South Carolina Department of Health and Environmental Control (DHEC) and EPA.

**I. General Provisions**

- A. The parties commit to develop, implement and maintain the early action SIP (which includes the local early action plans) providing EPA defers the effective date of the non-attainment designation and related requirements as long as all conditions of the EAC and key milestones are met.
- B. If the potential area of non-attainment does not meet all the terms of the EAC, then it will forfeit its participation and will be subject to the full planning requirements under applicable CAA

traditional SIP processes including requirements defined as part of the EPA's 8-hour ozone implementation rulemaking.

- C. If the area has had the effective date of a non-attainment designation deferred and the area does not reach attainment of the standard by December 31, 2007, then the non-attainment designation will be effective. If the EPA's implementation schedule also requires a traditional SIP from areas on or before December 31, 2007, then a traditional SIP revision demonstrating attainment by the new attainment date will be due for the non-attainment area no later than December 31, 2008.
- D. Before formal adoption into the early action SIP, this agreement may be modified or terminated by mutual consent of all parties, or any party may withdraw from the agreement by notifying other parties in writing. If a party's withdrawal from the agreement prevents remaining signatories from satisfying any of the terms and milestones of the original agreement, the agreement will be void, any deferred effective date of the non-attainment designation would be withdrawn and the area's non-attainment designation would become effective soon after. Upon termination or withdrawal from the EAC, the area will be subject to the full planning requirements under applicable CAA traditional processes including requirements defined as part of the EPA's 8-hour ozone implementation rulemaking. The local government signatories will approve the local early action plans before submittal to DHEC for inclusion in the early action SIP. Once the local early action plan is incorporated into the early action SIP, any modifications will be treated as SIP revisions.
- E. Execution of this EAC by each Party shall be by signature of each Party's authorized representative. This agreement remains in effect until December 31, 2007.

## II. **Early Action Compact Requirements**

- A. **Milestones and Reporting**  
DHEC and local areas will assess progress towards developing and implementing the early action SIP and make a report available to EPA and the public every six months beginning in June 2003. As per EPA guidance, the key milestones for participation in the EAC are identified in the following table.

<b>Local Plan /Early Action SIP Milestones</b>		
<b>DATE</b>	<b>MILESTONE</b>	<b>RESPONSIBILITY</b>
<b>December 31, 2002</b>	EAC signed by all parties and submitted to EPA	Local/State/EPA
<b>June 16, 2003</b>	Discussion of control measures being considered to EPA	Local/State
<b>March 31, 2004</b>	Final local early action plan submitted to DHEC; copy to EPA	Local
<b>December 31, 2004</b>	Early Action State Implementation Plan submitted to EPA for incorporation into SIP	State
<b>April 1, 2005</b>	Local/State control strategies implemented no later than this date	Local/State
<b>September 30, 2005</b>	EPA takes final action on SIP submitted December 31, 2004	EPA
<b>June 30, 2006</b>	State submits progress report to EPA	State
<b>December 31, 2007</b>	Attainment of the 8-hour ozone standard	Local/State

B. Emissions Inventories

1. DHEC will be responsible for developing emissions inventories.
2. An initial modeling emissions inventory will be completed by December 31, 2002. This inventory includes:
  - a. Emissions modeling data for a 1998 episode that is representative of a typical ozone season exceedance that meets the EPA episode selection guidance;
  - b. MOBILE6 for determining on-road mobile emissions;
  - c. NONROAD model data; and,
  - d. Area source database utilizing population data allocated statewide.
3. A 2007 future year modeling emissions inventory will be developed by March 31, 2004. This inventory will sufficiently account for projected future growth in ozone precursor emissions through 2007, particularly from stationary, non-road and on-road mobile sources.
4. Additional inventories will be contingent upon legislative appropriations or other funding. Selection of specific episode inventories will be partially determined by the conceptual model, which reflects an analysis of meteorological conditions typical of high ozone events.
5. Emissions inventories will be compared and analyzed for trends in emission sources over time. The emissions inventory comparison and analysis will be completed by December 31, 2003.

C. Modeling

1. DHEC will be responsible for conducting the meteorological and air quality modeling analysis. DHEC will conduct the modeling analysis based on the "Draft Guidance on the use of Models and Other Analyses in Attainment Demonstrations for the 8-Hour Ozone NAAQS" (EPA-454/R-99-004, May 1999). The modeling will follow the guidance as facilitated by the EPA Regional Office.
2. Base case modeling will be completed by December 31, 2002. Future case modeling will be completed by October 31, 2003. One or more modeled control cases will be completed by January 31, 2004, with final revisions completed by March 31, 2004. All modeling will:
  - be SIP quality and perform within EPA's accepted margin of accuracy;
  - be carefully documented;
  - sufficiently account for projected future growth in ozone precursor emissions;
  - be accomplished by DHEC and reviewed by EPA; and,
  - be used to determine the effectiveness of NO<sub>x</sub> and/or VOC reductions. The control case(s) will be used to determine the relative effectiveness of different emission reduction strategies and to aid in the selection of appropriate emission reduction strategies.

D. Control Strategies

1. All adopted Federal and State control strategies that have been or will be implemented by the December 31, 2007, attainment date will be included in base, future and control case modeling.
2. Additional local and state control strategies under consideration will be identified by June 16, 2003. The local and state control strategies selected will be implemented as soon as practical, but no later than April 1, 2005.
3. Local and state control strategies will be specific, quantified, permanent and enforceable. The strategies will also include specific implementation dates and detailed documentation and reporting processes.
4. Voluntary strategies can play a supporting role in the local early action plan and the early action SIP. If emission reductions from voluntary strategies are quantified and credit is taken for them in the local early action plan or the early action SIP, those emission reductions will be enforceable. Additional strategies must be implemented to meet those quantified reduction requirements if quantified voluntary strategies fail. This is true for all quantified emission reductions.
5. Local and state control strategies will be designed and implemented with full stakeholder participation.

6. Local and state control strategies will be incorporated by DHEC into the early action SIP. In the event that the local area desires to add, delete or substitute strategies after early action SIP submittal, the local area will request a modification. Local early action plan modifications will be treated as SIP revisions and facilitated by DHEC.

E. Maintenance for Growth

1. The early action SIP will include a component to address emissions growth at least five years beyond December 31, 2007, ensuring that the areas will remain in attainment of the 8-hour ozone standard during that period. Attainment maintenance analysis will be completed by January 31, 2004, with final revisions completed by March 31, 2004. The analysis will employ one or more of the following or any other appropriate techniques necessary to make such a demonstration:
  - a. Modeling analysis showing ozone levels below the 8-hour ozone standard in 2012;
  - b. An annual review of growth (especially mobile and stationary source) to ensure control measures and growth assumptions are adequate;
  - c. Identification and quantification of federal, state, and/or local measures indicating sufficient reductions to offset growth estimates; or,
  - d. Any other appropriate techniques necessary to make such a determination.
2. The early action SIP must also detail a continuing planning process that includes modeling updates and modeling assumption verification (particularly growth assumptions). Modeling updates and planning processes must consider and evaluate the following:
  - a. All relevant actual new point sources;
  - b. Impacts from potential new source growth; and,
  - c. Future transportation patterns and their impact on air quality in a manner that is consistent with the most current adopted Long Range Transportation Plan and most current trend and projections of local motor vehicle emissions.
3. If the review of emissions growth in conjunction with the continuing planning process demonstrates that adopted emission reduction strategies are inadequate to address growth in emissions, additional measures will be added to the early action plan. Local planning processes should prepare for this possibility.
4. In the event that the continuing planning process identifies the need to add, delete, or substitute control strategies after the local early action plan has been incorporated into the early action SIP, the local area will initiate, and DHEC will facilitate a SIP revision to accommodate changes.

**F. Public Involvement**

1. Public involvement has been and will continue to be strongly encouraged during the planning and implementation process.
2. Public awareness programs will be used to provide opportunities for involvement in the planning process, implementation of control strategies, and any other issues important to the area.
3. Interested stakeholders (i.e., local, state, and federal government, citizens, public interest groups, and the business community) will continue to be involved in the planning process as early as possible. Planning meetings will be open to the public, with posted meeting times and locations. Early action SIP drafts will be publicly available, and the drafting process will have sufficient opportunities for comment from all interested stakeholders.
4. Opportunities for public comment on the proposed early action SIP will be provided and will follow the traditional SIP revision process as implemented by DHEC.
5. Semi-annual reports detailing, at a minimum, progress toward key milestones, will be made available to the public.
6. DHEC has established and will maintain a website for South Carolina's Early Action Plan for the 8-hour ozone standard, located at [www.scdhec.net/baq/eap.html](http://www.scdhec.net/baq/eap.html).

**III. Local Government Responsibilities**

The local governments agree to develop and implement a local early action plan that will promote the area's attainment by December 31, 2007, of the 8-hour ozone standard and maintenance until at least 2012. The local governments will develop this plan in coordination with the DHEC, EPA, stakeholders and the public. The local early action plan will include a process to evaluate the effectiveness and maintain long-term compliance with the standard.

After all adopted Federal and State controls that have been or will be implemented by the attainment date of December 31, 2007, are accounted for in the modeling, the local area must adopt additional local controls, as necessary to demonstrate attainment of the 8-hour ozone standard by December 31, 2007. Local controls under consideration must be identified and described by June 16, 2003. These measures must be included in the semi-annual report made available to the public.

The draft local early action plan will be submitted to DHEC by August 31, 2003. The final local early action plan will be submitted to DHEC, with a copy forwarded to EPA, by March 31, 2004. The adopted local early action plan will be included in the early action SIP due December 31, 2004.

In the event a development or issue arises that may impact performance or progress toward key milestones (including if a key milestone will be or has been missed and/or if a termination or modification has been requested), the responsible party will notify all other signatories in writing as soon as possible.

#### **IV. The South Carolina Department of Health and Environmental Control**

DHEC agrees to develop and implement a state early action SIP that will demonstrate the participating area's attainment by December 31, 2007, of the 8-hour ozone standard and maintenance until at least 2012. DHEC will develop this plan in coordination with the local governments, EPA, stakeholders and the public. The state early action SIP will include a process to monitor and maintain long-term compliance with the standard.

It is the responsibility of each state under the CAA to ensure attainment with all National Ambient Air Quality Standards. At any such time that an area is deemed non-attainment, the state will be required to develop a plan to return the area(s) to attainment in accordance with the CAA. If applicable, South Carolina is committed to working with adjacent states to assure mutual attainment of national standards.

In the event a development or issue arises that may impact performance or progress toward key milestones (including if a key milestone will be or has been missed and/or if a termination or modification has been requested), DHEC will notify all other signatories in writing as soon as possible.

DHEC will provide support to areas throughout the planning and implementation process by:

1. Developing emission inventories, modeling, trend analysis, and quantification and comparison of control measures.
2. Providing necessary information on all federal and state adopted emission reduction measures, which affect the area.
3. Providing technical and strategic assistance, as appropriate, in the selection and implementation of control strategies.
4. Providing technical and planning assistance in developing and implementing processes to address the impact of emissions growth beyond the attainment date.
5. Maintaining monitors and reporting and analysis of monitoring data.
6. Promoting public awareness efforts.
7. Coordinating communication between local areas and the EPA to facilitate continuing the EPA review of local work.
8. Ensuring expeditious review of local early action plan(s), and if deemed adequate, proposing modification of the early action SIP to adopt the early action plan.

9. Adopting control measures into the early action SIP as expeditiously as possible. The final complete early action SIP revision must be completed, adopted, and submitted by the state to the EPA by December 31, 2004.
10. Tracking progress. If any milestone is missed and EPA withdraws the deferred effective date, thereby triggering a non-attainment designation and applicable statutory requirements, the state will strive to submit a traditional non-attainment SIP within one year. However, due to the South Carolina legislative review process, it may take at least eighteen months.
11. Working concurrently with areas not electing to participate in the early action SIP process in preparing the traditional SIP submittal as required by the CAA.

## **V. The Environmental Protection Agency**

The EPA will participate by:

1. Recognizing the local area's and state's commitment to voluntarily adopt an early, substantive, enforceable, and scientifically-based attainment plan with early implementation of control measures by becoming a party to the EAC developed in conformance with South Carolina's Protocol for Early Action Compacts.
2. Providing technical assistance to the state(s) and local area(s) in the development of the early action plan.
3. Reviewing and approving the completed early action SIP by no later than September 30, 2005.
4. Deferring the effective date of non-attainment designation and related requirements for participating areas that fail to meet the 8-hour ozone standard as long as all terms and key milestones of the EAC are being met, including submission of the early action SIP revision by December 31, 2004.
5. Designating the area expeditiously as attainment and imposing no additional requirements, provided that the monitors in the area reflect attainment by December 31, 2007.
6. Taking action to withdraw the deferred effective date if the area violates the standard as of December 31, 2007, and the area has had the effective date of its non-attainment designation deferred. The area's non-attainment designation will become effective soon after.
7. Ensuring appropriate credit in the traditional SIP process for all emissions reductions from measures implemented in the early action SIP if the area does not meet all the terms of the EAC; including meeting agreed-upon key milestones and is designated (or re-designated if necessary) according to the EPA's 8-hour ozone implementation guidelines. The EPA will offer such an area no delays, exemptions, or other favorable treatment because of its participation in the EAC.

8. Not allowing any area to renew their EAC after December 31, 2007, or initiate a new compact if it has previously forfeited its participation.

VI. Signatures

  
United States Environmental Protection Agency

Regional Administrator 12-31-02  
Title Date

R. Lemi Shaw  
South Carolina  
Department of Health and Environmental Control

Deputy Commissioner 12/20/02  
Title Date

  
York County Representative Title

Chairman, York County Council 12-9-02  
Date

## **Central Midlands Area**

## **Local Early Action Compacts**

**December 2002**



**SOUTH CAROLINA'S 8-HOUR OZONE  
EARLY ACTION COMPACT  
Fairfield County**

The United States Environmental Protection Agency (EPA) has provided an option for areas currently meeting the 1-hour ozone standard, like those in South Carolina, to attain the 8-hour ozone standard by December 31, 2007, and obtain cleaner air sooner than federally mandated. This option offers a more expeditious time line for achieving emissions reductions than expected under the EPA's 8-hour ozone implementation rulemaking, while providing "fail-safe" provisions for the area to revert to the traditional State Implementation Plan (SIP) process if specific milestones are not met. Through the development of this Early Action Compact (EAC), local, state, and EPA officials agree to work together to develop and implement local and state early action plans. The plans will become a part of the state early action SIP to reduce ground-level ozone concentrations to comply with the 8-hour ozone standard by December 31, 2007, and maintain the standard beyond that date. Failure to meet the obligations outlined in this EAC will result in immediate reversion to the traditional non-attainment designation process as required in the Clean Air Act (CAA).

In an effort to provide this information to areas within South Carolina, the South Carolina Department of Health and Environmental Control (DHEC) held six public meetings throughout the state. The locations of the meetings were targeted to areas that could potentially be designated as non-attainment for the 8-hour ozone standard. The meetings were held in Columbia, Greenville, Florence, Rock Hill, Aiken and Charleston. EPA officials participated in five of the six meetings. The general public, local government representatives, industry representatives, and environmental interest groups attended the meetings. Prior to the meetings, DHEC issued a press release regarding the development of an early action SIP. Correspondence including a fact sheet was sent to all county administrators, Councils of Governments, Metropolitan Planning Organizations, public interest groups, industry representatives, other state agencies and others determined to be stakeholders in the process.

The Parties to this (EAC) are: Fairfield County, South Carolina Department of Health and Environmental Control (DHEC) and EPA.

**I. General Provisions**

- A. The parties commit to develop, implement and maintain the early action SIP (which includes the local early action plans) providing EPA defers the effective date of the non-attainment designation and related requirements as long as all conditions of the EAC and key milestones are met.
- B. If the potential area of non-attainment does not meet all the terms of the EAC, then it will forfeit its participation and will be subject to the full planning requirements under applicable CAA

traditional SIP processes including requirements defined as part of the EPA's 8-hour ozone implementation rulemaking.

- C. If the area has had the effective date of a non-attainment designation deferred and the area does not reach attainment of the standard by December 31, 2007, then the non-attainment designation will be effective. If the EPA's implementation schedule also requires a traditional SIP from areas on or before December 31, 2007, then a traditional SIP revision demonstrating attainment by the new attainment date will be due for the non-attainment area no later than December 31, 2008.
- D. Before formal adoption into the early action SIP, this agreement may be modified or terminated by mutual consent of all parties, or any party may withdraw from the agreement by notifying other parties in writing. If a party's withdrawal from the agreement prevents remaining signatories from satisfying any of the terms and milestones of the original agreement, the agreement will be void, any deferred effective date of the non-attainment designation would be withdrawn and the area's non-attainment designation would become effective soon after. Upon termination or withdrawal from the EAC, the area will be subject to the full planning requirements under applicable CAA traditional processes including requirements defined as part of the EPA's 8-hour ozone implementation rulemaking. The local government signatories will approve the local early action plans before submittal to DHEC for inclusion in the early action SIP. Once the local early action plan is incorporated into the early action SIP, any modifications will be treated as SIP revisions.
- E. Execution of this EAC by each Party shall be by signature of each Party's authorized representative. This agreement remains in effect until December 31, 2007.

## II. **Early Action Compact Requirements**

- A. **Milestones and Reporting**  
DHEC and local areas will assess progress towards developing and implementing the early action SIP and make a report available to EPA and the public every six months beginning in June 2003. As per EPA guidance, the key milestones for participation in the EAC are identified in the following table.

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B. Emissions Inventories

1. DHEC will be responsible for developing emissions inventories.
2. An initial modeling emissions inventory will be completed by December 31, 2002. This inventory includes:
  - a. Emissions modeling data for a 1998 episode that is representative of a typical ozone season exceedance that meets the EPA episode selection guidance;
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  - be SIP quality and perform within EPA's accepted margin of accuracy;
  - be carefully documented;
  - sufficiently account for projected future growth in ozone precursor emissions;
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  - be used to determine the effectiveness of NO<sub>x</sub> and/or VOC reductions. The control case(s) will be used to determine the relative effectiveness of different emission reduction strategies and to aid in the selection of appropriate emission reduction strategies.

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5. Local and state control strategies will be designed and implemented with full stakeholder participation.

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2. The early action SIP must also detail a continuing planning process that includes modeling updates and modeling assumption verification (particularly growth assumptions). Modeling updates and planning processes must consider and evaluate the following:
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  - c. Future transportation patterns and their impact on air quality in a manner that is consistent with the most current adopted Long Range Transportation Plan and most current trend and projections of local motor vehicle emissions.
3. If the review of emissions growth in conjunction with the continuing planning process demonstrates that adopted emission reduction strategies are inadequate to address growth in emissions, additional measures will be added to the early action plan. Local planning processes should prepare for this possibility.
4. In the event that the continuing planning process identifies the need to add, delete, or substitute control strategies after the local early action plan has been incorporated into the early action SIP, the local area will initiate, and DHEC will facilitate a SIP revision to accommodate changes.

**F. Public Involvement**

1. Public involvement has been and will continue to be strongly encouraged during the planning and implementation process.
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3. Interested stakeholders (i.e., local, state, and federal government, citizens, public interest groups, and the business community) will continue to be involved in the planning process as early as possible. Planning meetings will be open to the public, with posted meeting times and locations. Early action SIP drafts will be publicly available, and the drafting process will have sufficient opportunities for comment from all interested stakeholders.
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7. Coordinating communication between local areas and the EPA to facilitate continuing the EPA review of local work.
8. Ensuring expeditious review of local early action plan(s), and if deemed adequate, proposing modification of the early action SIP to adopt the early action plan.

9. Adopting control measures into the early action SIP as expeditiously as possible. The final complete early action SIP revision must be completed, adopted, and submitted by the state to the EPA by December 31, 2004.
10. Tracking progress. If any milestone is missed and EPA withdraws the deferred effective date, thereby triggering a non-attainment designation and applicable statutory requirements, the state will strive to submit a traditional non-attainment SIP within one year. However, due to the South Carolina legislative review process, it may take at least eighteen months.
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## **V. The Environmental Protection Agency**

The EPA will participate by:

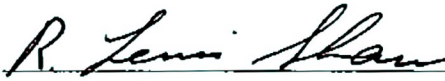
1. Recognizing the local area's and state's commitment to voluntarily adopt an early, substantive, enforceable, and scientifically-based attainment plan with early implementation of control measures by becoming a party to the EAC developed in conformance with South Carolina's Protocol for Early Action Compacts.
2. Providing technical assistance to the state(s) and local area(s) in the development of the early action plan.
3. Reviewing and approving the completed early action SIP by no later than September 30, 2005.
4. Deferring the effective date of non-attainment designation and related requirements for participating areas that fail to meet the 8-hour ozone standard as long as all terms and key milestones of the EAC are being met, including submission of the early action SIP revision by December 31, 2004.
5. Designating the area expeditiously as attainment and imposing no additional requirements, provided that the monitors in the area reflect attainment by December 31, 2007.
6. Taking action to withdraw the deferred effective date if the area violates the standard as of December 31, 2007, and the area has had the effective date of its non-attainment designation deferred. The area's non-attainment designation will become effective soon after.
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8. Not allowing any area to renew their EAC after December 31, 2007, or initiate a new compact if it has previously forfeited its participation.

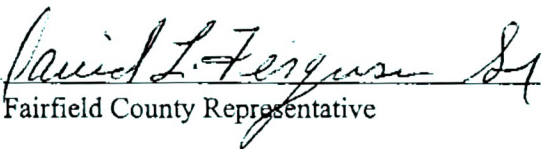
VI. Signatures

  
United States Environmental Protection Agency

Regional Administrator 12-30-02  
Title Date

  
South Carolina  
Department of Health and Environmental Control

Deputy Commissioner 12/22/02  
Title Date

  
Fairfield County Representative

Chairman 12/23/2002  
Title Date

**SOUTH CAROLINA'S 8-HOUR OZONE  
EARLY ACTION COMPACT  
Lexington County**

The United States Environmental Protection Agency (EPA) has provided an option for areas currently meeting the 1-hour ozone standard, like those in South Carolina, to attain the 8-hour ozone standard by December 31, 2007, and obtain cleaner air sooner than federally mandated. This option offers a more expeditious time line for achieving emissions reductions than expected under the EPA's 8-hour ozone implementation rulemaking, while providing "fail-safe" provisions for the area to revert to the traditional State Implementation Plan (SIP) process if specific milestones are not met. Through the development of this Early Action Compact (EAC), local, state, and EPA officials agree to work together to develop and implement local and state early action plans. The plans will become a part of the state early action SIP to reduce ground-level ozone concentrations to comply with the 8-hour ozone standard by December 31, 2007, and maintain the standard beyond that date. Failure to meet the obligations outlined in this EAC will result in immediate reversion to the traditional non-attainment designation process as required in the Clean Air Act (CAA).

In an effort to provide this information to areas within South Carolina, the South Carolina Department of Health and Environmental Control (DHEC) held six public meetings throughout the state. The locations of the meetings were targeted to areas that could potentially be designated as non-attainment for the 8-hour ozone standard. The meetings were held in Columbia, Greenville, Florence, Rock Hill, Aiken and Charleston. EPA officials participated in five of the six meetings. The general public, local government representatives, industry representatives, and environmental interest groups attended the meetings. Prior to the meetings, DHEC issued a press release regarding the development of an early action SIP. Correspondence including a fact sheet was sent to all county administrators, Councils of Governments, Metropolitan Planning Organizations, public interest groups, industry representatives, other state agencies and others determined to be stakeholders in the process.

The Parties to this (EAC) are: Lexington County, South Carolina Department of Health and Environmental Control (DHEC) and EPA.

**I. General Provisions**

- A. The parties commit to develop, implement and maintain the early action SIP (which includes the local early action plans) providing EPA defers the effective date of the non-attainment designation and related requirements as long as all conditions of the EAC and key milestones are met.
- B. If the potential area of non-attainment does not meet all the terms of the EAC, then it will forfeit its participation and will be subject to the full planning requirements under applicable CAA

traditional SIP processes including requirements defined as part of the EPA's 8-hour ozone implementation rulemaking.

- C. If the area has had the effective date of a non-attainment designation deferred and the area does not reach attainment of the standard by December 31, 2007, then the non-attainment designation will be effective. If the EPA's implementation schedule also requires a traditional SIP from areas on or before December 31, 2007, then a traditional SIP revision demonstrating attainment by the new attainment date will be due for the non-attainment area no later than December 31, 2008.
- D. Before formal adoption into the early action SIP, this agreement may be modified or terminated by mutual consent of all parties, or any party may withdraw from the agreement by notifying other parties in writing. If a party's withdrawal from the agreement prevents remaining signatories from satisfying any of the terms and milestones of the original agreement, the agreement will be void, any deferred effective date of the non-attainment designation would be withdrawn and the area's non-attainment designation would become effective soon after. Upon termination or withdrawal from the EAC, the area will be subject to the full planning requirements under applicable CAA traditional processes including requirements defined as part of the EPA's 8-hour ozone implementation rulemaking. The local government signatories will approve the local early action plans before submittal to DHEC for inclusion in the early action SIP. Once the local early action plan is incorporated into the early action SIP, any modifications will be treated as SIP revisions.
- E. Execution of this EAC by each Party shall be by signature of each Party's authorized representative. This agreement remains in effect until December 31, 2007.

## II. **Early Action Compact Requirements**

- A. **Milestones and Reporting**  
DHEC and local areas will assess progress towards developing and implementing the early action SIP and make a report available to EPA and the public every six months beginning in June 2003. As per EPA guidance, the key milestones for participation in the EAC are identified in the following table.

<b>Local Plan /Early Action SIP Milestones</b>		
<b>DATE</b>	<b>MILESTONE</b>	<b>RESPONSIBILITY</b>
<b>December 31, 2002</b>	EAC signed by all parties and submitted to EPA	Local/State/EPA
<b>June 16, 2003</b>	Discussion of control measures being considered to EPA	Local/State
<b>March 31, 2004</b>	Final local early action plan submitted to DHEC; copy to EPA	Local
<b>December 31, 2004</b>	Early Action State Implementation Plan submitted to EPA for incorporation into SIP	State
<b>April 1, 2005</b>	Local/State control strategies implemented no later than this date	Local/State
<b>September 30, 2005</b>	EPA takes final action on SIP submitted December 31, 2004	EPA
<b>June 30, 2006</b>	State submits progress report to EPA	State
<b>December 31, 2007</b>	Attainment of the 8-hour ozone standard	Local/State

B. Emissions Inventories

1. DHEC will be responsible for developing emissions inventories.
2. An initial modeling emissions inventory will be completed by December 31, 2002. This inventory includes:
  - a. Emissions modeling data for a 1998 episode that is representative of a typical ozone season exceedance that meets the EPA episode selection guidance;
  - b. MOBILE6 for determining on-road mobile emissions;
  - c. NONROAD model data; and,
  - d. Area source database utilizing population data allocated statewide.
3. A 2007 future year modeling emissions inventory will be developed by March 31, 2004. This inventory will sufficiently account for projected future growth in ozone precursor emissions through 2007, particularly from stationary, non-road and on-road mobile sources.
4. Additional inventories will be contingent upon legislative appropriations or other funding. Selection of specific episode inventories will be partially determined by the conceptual model, which reflects an analysis of meteorological conditions typical of high ozone events.
5. Emissions inventories will be compared and analyzed for trends in emission sources over time. The emissions inventory comparison and analysis will be completed by December 31, 2003.

C. Modeling

1. DHEC will be responsible for conducting the meteorological and air quality modeling analysis. DHEC will conduct the modeling analysis based on the "Draft Guidance on the use of Models and Other Analyses in Attainment Demonstrations for the 8-Hour Ozone NAAQS" (EPA-454/R-99-004, May 1999). The modeling will follow the guidance as facilitated by the EPA Regional Office.
2. Base case modeling will be completed by December 31, 2002. Future case modeling will be completed by October 31, 2003. One or more modeled control cases will be completed by January 31, 2004, with final revisions completed by March 31, 2004. All modeling will:
  - be SIP quality and perform within EPA's accepted margin of accuracy;
  - be carefully documented;
  - sufficiently account for projected future growth in ozone precursor emissions;
  - be accomplished by DHEC and reviewed by EPA; and,
  - be used to determine the effectiveness of NO<sub>x</sub> and/or VOC reductions. The control case(s) will be used to determine the relative effectiveness of different emission reduction strategies and to aid in the selection of appropriate emission reduction strategies.

D. Control Strategies

1. All adopted Federal and State control strategies that have been or will be implemented by the December 31, 2007, attainment date will be included in base, future and control case modeling.
2. Additional local and state control strategies under consideration will be identified by June 16, 2003. The local and state control strategies selected will be implemented as soon as practical, but no later than April 1, 2005.
3. Local and state control strategies will be specific, quantified, permanent and enforceable. The strategies will also include specific implementation dates and detailed documentation and reporting processes.
4. Voluntary strategies can play a supporting role in the local early action plan and the early action SIP. If emission reductions from voluntary strategies are quantified and credit is taken for them in the local early action plan or the early action SIP, those emission reductions will be enforceable. Additional strategies must be implemented to meet those quantified reduction requirements if quantified voluntary strategies fail. This is true for all quantified emission reductions.
5. Local and state control strategies will be designed and implemented with full stakeholder participation.

6. Local and state control strategies will be incorporated by DHEC into the early action SIP. In the event that the local area desires to add, delete or substitute strategies after early action SIP submittal, the local area will request a modification. Local early action plan modifications will be treated as SIP revisions and facilitated by DHEC.

E. Maintenance for Growth

1. The early action SIP will include a component to address emissions growth at least five years beyond December 31, 2007, ensuring that the areas will remain in attainment of the 8-hour ozone standard during that period. Attainment maintenance analysis will be completed by January 31, 2004, with final revisions completed by March 31, 2004. The analysis will employ one or more of the following or any other appropriate techniques necessary to make such a demonstration:
  - a. Modeling analysis showing ozone levels below the 8-hour ozone standard in 2012;
  - b. An annual review of growth (especially mobile and stationary source) to ensure control measures and growth assumptions are adequate;
  - c. Identification and quantification of federal, state, and/or local measures indicating sufficient reductions to offset growth estimates; or,
  - d. Any other appropriate techniques necessary to make such a determination.
2. The early action SIP must also detail a continuing planning process that includes modeling updates and modeling assumption verification (particularly growth assumptions). Modeling updates and planning processes must consider and evaluate the following:
  - a. All relevant actual new point sources;
  - b. Impacts from potential new source growth; and,
  - c. Future transportation patterns and their impact on air quality in a manner that is consistent with the most current adopted Long Range Transportation Plan and most current trend and projections of local motor vehicle emissions.
3. If the review of emissions growth in conjunction with the continuing planning process demonstrates that adopted emission reduction strategies are inadequate to address growth in emissions, additional measures will be added to the early action plan. Local planning processes should prepare for this possibility.
4. In the event that the continuing planning process identifies the need to add, delete, or substitute control strategies after the local early action plan has been incorporated into the early action SIP, the local area will initiate, and DHEC will facilitate a SIP revision to accommodate changes.

**F. Public Involvement**

1. Public involvement has been and will continue to be strongly encouraged during the planning and implementation process.
2. Public awareness programs will be used to provide opportunities for involvement in the planning process, implementation of control strategies, and any other issues important to the area.
3. Interested stakeholders (i.e., local, state, and federal government, citizens, public interest groups, and the business community) will continue to be involved in the planning process as early as possible. Planning meetings will be open to the public, with posted meeting times and locations. Early action SIP drafts will be publicly available, and the drafting process will have sufficient opportunities for comment from all interested stakeholders.
4. Opportunities for public comment on the proposed early action SIP will be provided and will follow the traditional SIP revision process as implemented by DHEC.
5. Semi-annual reports detailing, at a minimum, progress toward key milestones, will be made available to the public.
6. DHEC has established and will maintain a website for South Carolina's Early Action Plan for the 8-hour ozone standard, located at [www.scdhec.net/baq/eap.html](http://www.scdhec.net/baq/eap.html).

**III. Local Government Responsibilities**

The local governments agree to develop and implement a local early action plan that will promote the area's attainment by December 31, 2007, of the 8-hour ozone standard and maintenance until at least 2012. The local governments will develop this plan in coordination with the DHEC, EPA, stakeholders and the public. The local early action plan will include a process to evaluate the effectiveness and maintain long-term compliance with the standard.

After all adopted Federal and State controls that have been or will be implemented by the attainment date of December 31, 2007, are accounted for in the modeling, the local area must adopt additional local controls, as necessary to demonstrate attainment of the 8-hour ozone standard by December 31, 2007. Local controls under consideration must be identified and described by June 16, 2003. These measures must be included in the semi-annual report made available to the public.

The draft local early action plan will be submitted to DHEC by August 31, 2003. The final local early action plan will be submitted to DHEC, with a copy forwarded to EPA, by March 31, 2004. The adopted local early action plan will be included in the early action SIP due December 31, 2004.

In the event a development or issue arises that may impact performance or progress toward key milestones (including if a key milestone will be or has been missed and/or if a termination or modification has been requested), the responsible party will notify all other signatories in writing as soon as possible.

#### **IV. The South Carolina Department of Health and Environmental Control**

DHEC agrees to develop and implement a state early action SIP that will demonstrate the participating area's attainment by December 31, 2007, of the 8-hour ozone standard and maintenance until at least 2012. DHEC will develop this plan in coordination with the local governments, EPA, stakeholders and the public. The state early action SIP will include a process to monitor and maintain long-term compliance with the standard.

It is the responsibility of each state under the CAA to ensure attainment with all National Ambient Air Quality Standards. At any such time that an area is deemed non-attainment, the state will be required to develop a plan to return the area(s) to attainment in accordance with the CAA. If applicable, South Carolina is committed to working with adjacent states to assure mutual attainment of national standards.

In the event a development or issue arises that may impact performance or progress toward key milestones (including if a key milestone will be or has been missed and/or if a termination or modification has been requested), DHEC will notify all other signatories in writing as soon as possible.

DHEC will provide support to areas throughout the planning and implementation process by:

1. Developing emission inventories, modeling, trend analysis, and quantification and comparison of control measures.
2. Providing necessary information on all federal and state adopted emission reduction measures, which affect the area.
3. Providing technical and strategic assistance, as appropriate, in the selection and implementation of control strategies.
4. Providing technical and planning assistance in developing and implementing processes to address the impact of emissions growth beyond the attainment date.
5. Maintaining monitors and reporting and analysis of monitoring data.
6. Promoting public awareness efforts.
7. Coordinating communication between local areas and the EPA to facilitate continuing the EPA review of local work.
8. Ensuring expeditious review of local early action plan(s), and if deemed adequate, proposing modification of the early action SIP to adopt the early action plan.

9. Adopting control measures into the early action SIP as expeditiously as possible. The final complete early action SIP revision must be completed, adopted, and submitted by the state to the EPA by December 31, 2004.
10. Tracking progress. If any milestone is missed and EPA withdraws the deferred effective date, thereby triggering a non-attainment designation and applicable statutory requirements, the state will strive to submit a traditional non-attainment SIP within one year. However, due to the South Carolina legislative review process, it may take at least eighteen months.
11. Working concurrently with areas not electing to participate in the early action SIP process in preparing the traditional SIP submittal as required by the CAA.

## **V. The Environmental Protection Agency**

The EPA will participate by:

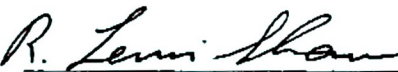
1. Recognizing the local area's and state's commitment to voluntarily adopt an early, substantive, enforceable, and scientifically-based attainment plan with early implementation of control measures by becoming a party to the EAC developed in conformance with South Carolina's Protocol for Early Action Compacts.
2. Providing technical assistance to the state(s) and local area(s) in the development of the early action plan.
3. Reviewing and approving the completed early action SIP by no later than September 30, 2005.
4. Deferring the effective date of non-attainment designation and related requirements for participating areas that fail to meet the 8-hour ozone standard as long as all terms and key milestones of the EAC are being met, including submission of the early action SIP revision by December 31, 2004.
5. Designating the area expeditiously as attainment and imposing no additional requirements, provided that the monitors in the area reflect attainment by December 31, 2007.
6. Taking action to withdraw the deferred effective date if the area violates the standard as of December 31, 2007, and the area has had the effective date of its non-attainment designation deferred. The area's non-attainment designation will become effective soon after.
7. Ensuring appropriate credit in the traditional SIP process for all emissions reductions from measures implemented in the early action SIP if the area does not meet all the terms of the EAC; including meeting agreed-upon key milestones and is designated (or re-designated if necessary) according to the EPA's 8-hour ozone implementation guidelines. The EPA will offer such an area no delays, exemptions, or other favorable treatment because of its participation in the EAC.

8. Not allowing any area to renew their EAC after December 31, 2007, or initiate a new compact if it has previously forfeited its participation.

VI. Signatures

  
United States Environmental Protection Agency

Regional Administrator 12-30-02  
Title Date

  
South Carolina  
Department of Health and Environmental Control

Deputy Commissioner 12/27/02  
Title Date

  
Lexington County Representative

CHAIRMAN Dec 10 2002  
Title Date

**SOUTH CAROLINA'S 8-HOUR OZONE  
EARLY ACTION COMPACT**  
Newberry County

The United States Environmental Protection Agency (EPA) has provided an option for areas currently meeting the 1-hour ozone standard, like those in South Carolina, to attain the 8-hour ozone standard by December 31, 2007, and obtain cleaner air sooner than federally mandated. This option offers a more expeditious time line for achieving emissions reductions than expected under the EPA's 8-hour ozone implementation rulemaking, while providing "fail-safe" provisions for the area to revert to the traditional State Implementation Plan (SIP) process if specific milestones are not met. Through the development of this Early Action Compact (EAC), local, state, and EPA officials agree to work together to develop and implement local and state early action plans. The plans will become a part of the state early action SIP to reduce ground-level ozone concentrations to comply with the 8-hour ozone standard by December 31, 2007, and maintain the standard beyond that date. Failure to meet the obligations outlined in this EAC will result in immediate reversion to the traditional non-attainment designation process as required in the Clean Air Act (CAA).

In an effort to provide this information to areas within South Carolina, the South Carolina Department of Health and Environmental Control (DHEC) held six public meetings throughout the state. The locations of the meetings were targeted to areas that could potentially be designated as non-attainment for the 8-hour ozone standard. The meetings were held in Columbia, Greenville, Florence, Rock Hill, Aiken and Charleston. EPA officials participated in five of the six meetings. The general public, local government representatives, industry representatives, and environmental interest groups attended the meetings. Prior to the meetings, DHEC issued a press release regarding the development of an early action SIP. Correspondence including a fact sheet was sent to all county administrators, Councils of Governments, Metropolitan Planning Organizations, public interest groups, industry representatives, other state agencies and others determined to be stakeholders in the process.

The Parties to this EAC are: Newberry County, South Carolina Department of Health and Environmental Control (DHEC) and EPA.

**I. General Provisions**

- A. The parties commit to develop, implement and maintain the early action SIP (which includes the local early action plans) providing EPA defers the effective date of the non-attainment designation and related requirements as long as all conditions of the EAC and key milestones are met.
- B. If the potential area of non-attainment does not meet all the terms of the EAC, then it will forfeit its participation and will be subject to the full planning requirements under applicable CAA

traditional SIP processes including requirements defined as part of the EPA's 8-hour ozone implementation rulemaking.

- C. If the area has had the effective date of a non-attainment designation deferred and the area does not reach attainment of the standard by December 31, 2007, then the non-attainment designation will be effective. If the EPA's implementation schedule also requires a traditional SIP from areas on or before December 31, 2007, then a traditional SIP revision demonstrating attainment by the new attainment date will be due for the non-attainment area no later than December 31, 2008.
- D. Before formal adoption into the early action SIP, this agreement may be modified or terminated by mutual consent of all parties, or any party may withdraw from the agreement by notifying other parties in writing. If a party's withdrawal from the agreement prevents remaining signatories from satisfying any of the terms and milestones of the original agreement, the agreement will be void, any deferred effective date of the non-attainment designation would be withdrawn and the area's non-attainment designation would become effective soon after. Upon termination or withdrawal from the EAC, the area will be subject to the full planning requirements under applicable CAA traditional processes including requirements defined as part of the EPA's 8-hour ozone implementation rulemaking. The local government signatories will approve the local early action plans before submittal to DHEC for inclusion in the early action SIP. Once the local early action plan is incorporated into the early action SIP, any modifications will be treated as SIP revisions.
- E. Execution of this EAC by each Party shall be by signature of each Party's authorized representative. This agreement remains in effect until December 31, 2007.

## II. **Early Action Compact Requirements**

- A. **Milestones and Reporting**  
DHEC and local areas will assess progress towards developing and implementing the early action SIP and make a report available to EPA and the public every six months beginning in June 2003. As per EPA guidance, the key milestones for participation in the EAC are identified in the following table.

<b>Local Plan /Early Action SIP Milestones</b>		
<b>DATE</b>	<b>MILESTONE</b>	<b>RESPONSIBILITY</b>
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<b>September 30, 2005</b>	EPA takes final action on SIP submitted December 31, 2004	EPA
<b>June 30, 2006</b>	State submits progress report to EPA	State
<b>December 31, 2007</b>	Attainment of the 8-hour ozone standard	Local/State

B. Emissions Inventories

1. DHEC will be responsible for developing emissions inventories.
2. An initial modeling emissions inventory will be completed by December 31, 2002. This inventory includes:
  - a. Emissions modeling data for a 1998 episode that is representative of a typical ozone season exceedance that meets the EPA episode selection guidance;
  - b. MOBILE6 for determining on-road mobile emissions;
  - c. NONROAD model data; and,
  - d. Area source database utilizing population data allocated statewide.
3. A 2007 future year modeling emissions inventory will be developed by March 31, 2004. This inventory will sufficiently account for projected future growth in ozone precursor emissions through 2007, particularly from stationary, non-road and on-road mobile sources.
4. Additional inventories will be contingent upon legislative appropriations or other funding. Selection of specific episode inventories will be partially determined by the conceptual model, which reflects an analysis of meteorological conditions typical of high ozone events.
5. Emissions inventories will be compared and analyzed for trends in emission sources over time. The emissions inventory comparison and analysis will be completed by December 31, 2003.

C. Modeling

1. DHEC will be responsible for conducting the meteorological and air quality modeling analysis. DHEC will conduct the modeling analysis based on the "Draft Guidance on the use of Models and Other Analyses in Attainment Demonstrations for the 8-Hour Ozone NAAQS" (EPA-454/R-99-004, May 1999). The modeling will follow the guidance as facilitated by the EPA Regional Office.
2. Base case modeling will be completed by December 31, 2002. Future case modeling will be completed by October 31, 2003. One or more modeled control cases will be completed by January 31, 2004, with final revisions completed by March 31, 2004. All modeling will:
  - be SIP quality and perform within EPA's accepted margin of accuracy;
  - be carefully documented;
  - sufficiently account for projected future growth in ozone precursor emissions;
  - be accomplished by DHEC and reviewed by EPA; and,
  - be used to determine the effectiveness of NO<sub>x</sub> and/or VOC reductions. The control case(s) will be used to determine the relative effectiveness of different emission reduction strategies and to aid in the selection of appropriate emission reduction strategies.

D. Control Strategies

1. All adopted Federal and State control strategies that have been or will be implemented by the December 31, 2007, attainment date will be included in base, future and control case modeling.
2. Additional local and state control strategies under consideration will be identified by June 16, 2003. The local and state control strategies selected will be implemented as soon as practical, but no later than April 1, 2005.
3. Local and state control strategies will be specific, quantified, permanent and enforceable. The strategies will also include specific implementation dates and detailed documentation and reporting processes.
4. Voluntary strategies can play a supporting role in the local early action plan and the early action SIP. If emission reductions from voluntary strategies are quantified and credit is taken for them in the local early action plan or the early action SIP, those emission reductions will be enforceable. Additional strategies must be implemented to meet those quantified reduction requirements if quantified voluntary strategies fail. This is true for all quantified emission reductions.
5. Local and state control strategies will be designed and implemented with full stakeholder participation.

6. Local and state control strategies will be incorporated by DHEC into the early action SIP. In the event that the local area desires to add, delete or substitute strategies after early action SIP submittal, the local area will request a modification. Local early action plan modifications will be treated as SIP revisions and facilitated by DHEC.

E. Maintenance for Growth

1. The early action SIP will include a component to address emissions growth at least five years beyond December 31, 2007, ensuring that the areas will remain in attainment of the 8-hour ozone standard during that period. Attainment maintenance analysis will be completed by January 31, 2004, with final revisions completed by March 31, 2004. The analysis will employ one or more of the following or any other appropriate techniques necessary to make such a demonstration:
  - a. Modeling analysis showing ozone levels below the 8-hour ozone standard in 2012;
  - b. An annual review of growth (especially mobile and stationary source) to ensure control measures and growth assumptions are adequate;
  - c. Identification and quantification of federal, state, and/or local measures indicating sufficient reductions to offset growth estimates; or,
  - d. Any other appropriate techniques necessary to make such a determination.
2. The early action SIP must also detail a continuing planning process that includes modeling updates and modeling assumption verification (particularly growth assumptions). Modeling updates and planning processes must consider and evaluate the following:
  - a. All relevant actual new point sources;
  - b. Impacts from potential new source growth; and,
  - c. Future transportation patterns and their impact on air quality in a manner that is consistent with the most current adopted Long Range Transportation Plan and most current trend and projections of local motor vehicle emissions.
3. If the review of emissions growth in conjunction with the continuing planning process demonstrates that adopted emission reduction strategies are inadequate to address growth in emissions, additional measures will be added to the early action plan. Local planning processes should prepare for this possibility.
4. In the event that the continuing planning process identifies the need to add, delete, or substitute control strategies after the local early action plan has been incorporated into the early action SIP, the local area will initiate, and DHEC will facilitate a SIP revision to accommodate changes.

**F. Public Involvement**

1. Public involvement has been and will continue to be strongly encouraged during the planning and implementation process.
2. Public awareness programs will be used to provide opportunities for involvement in the planning process, implementation of control strategies, and any other issues important to the area.
3. Interested stakeholders (i.e., local, state, and federal government, citizens, public interest groups, and the business community) will continue to be involved in the planning process as early as possible. Planning meetings will be open to the public, with posted meeting times and locations. Early action SIP drafts will be publicly available, and the drafting process will have sufficient opportunities for comment from all interested stakeholders.
4. Opportunities for public comment on the proposed early action SIP will be provided and will follow the traditional SIP revision process as implemented by DHEC.
5. Semi-annual reports detailing, at a minimum, progress toward key milestones, will be made available to the public.
6. DHEC has established and will maintain a website for South Carolina's Early Action Plan for the 8-hour ozone standard, located at [www.scdhec.net/baq/eap.html](http://www.scdhec.net/baq/eap.html).

**III. Local Government Responsibilities**

The local governments agree to develop and implement a local early action plan that will promote the area's attainment by December 31, 2007, of the 8-hour ozone standard and maintenance until at least 2012. The local governments will develop this plan in coordination with the DHEC, EPA, stakeholders and the public. The local early action plan will include a process to evaluate the effectiveness and maintain long-term compliance with the standard.

After all adopted Federal and State controls that have been or will be implemented by the attainment date of December 31, 2007, are accounted for in the modeling, the local area must adopt additional local controls, as necessary to demonstrate attainment of the 8-hour ozone standard by December 31, 2007. Local controls under consideration must be identified and described by June 16, 2003. These measures must be included in the semi-annual report made available to the public.

The draft local early action plan will be submitted to DHEC by August 31, 2003. The final local early action plan will be submitted to DHEC, with a copy forwarded to EPA, by March 31, 2004. The adopted local early action plan will be included in the early action SIP due December 31, 2004.

In the event a development or issue arises that may impact performance or progress toward key milestones (including if a key milestone will be or has been missed and/or if a termination or modification has been requested), the responsible party will notify all other signatories in writing as soon as possible.

#### **IV. The South Carolina Department of Health and Environmental Control**

DHEC agrees to develop and implement a state early action SIP that will demonstrate the participating area's attainment by December 31, 2007, of the 8-hour ozone standard and maintenance until at least 2012. DHEC will develop this plan in coordination with the local governments, EPA, stakeholders and the public. The state early action SIP will include a process to monitor and maintain long-term compliance with the standard.

It is the responsibility of each state under the CAA to ensure attainment with all National Ambient Air Quality Standards. At any such time that an area is deemed non-attainment, the state will be required to develop a plan to return the area(s) to attainment in accordance with the CAA. If applicable, South Carolina is committed to working with adjacent states to assure mutual attainment of national standards.

In the event a development or issue arises that may impact performance or progress toward key milestones (including if a key milestone will be or has been missed and/or if a termination or modification has been requested), DHEC will notify all other signatories in writing as soon as possible.

DHEC will provide support to areas throughout the planning and implementation process by:

1. Developing emission inventories, modeling, trend analysis, and quantification and comparison of control measures.
2. Providing necessary information on all federal and state adopted emission reduction measures, which affect the area.
3. Providing technical and strategic assistance, as appropriate, in the selection and implementation of control strategies.
4. Providing technical and planning assistance in developing and implementing processes to address the impact of emissions growth beyond the attainment date.
5. Maintaining monitors and reporting and analysis of monitoring data.
6. Promoting public awareness efforts.
7. Coordinating communication between local areas and the EPA to facilitate continuing the EPA review of local work.
8. Ensuring expeditious review of local early action plan(s), and if deemed adequate, proposing modification of the early action SIP to adopt the early action plan.

9. Adopting control measures into the early action SIP as expeditiously as possible. The final complete early action SIP revision must be completed, adopted, and submitted by the state to the EPA by December 31, 2004.
10. Tracking progress. If any milestone is missed and EPA withdraws the deferred effective date, thereby triggering a non-attainment designation and applicable statutory requirements, the state will strive to submit a traditional non-attainment SIP within one year. However, due to the South Carolina legislative review process, it may take at least eighteen months.
11. Working concurrently with areas not electing to participate in the early action SIP process in preparing the traditional SIP submittal as required by the CAA.

## **V. The Environmental Protection Agency**

The EPA will participate by:

1. Recognizing the local area's and state's commitment to voluntarily adopt an early, substantive, enforceable, and scientifically-based attainment plan with early implementation of control measures by becoming a party to the EAC developed in conformance with South Carolina's Protocol for Early Action Compacts.
2. Providing technical assistance to the state(s) and local area(s) in the development of the early action plan.
3. Reviewing and approving the completed early action SIP by no later than September 30, 2005.
4. Deferring the effective date of non-attainment designation and related requirements for participating areas that fail to meet the 8-hour ozone standard as long as all terms and key milestones of the EAC are being met, including submission of the early action SIP revision by December 31, 2004.
5. Designating the area expeditiously as attainment and imposing no additional requirements, provided that the monitors in the area reflect attainment by December 31, 2007.
6. Taking action to withdraw the deferred effective date if the area violates the standard as of December 31, 2007, and the area has had the effective date of its non-attainment designation deferred. The area's non-attainment designation will become effective soon after.
7. Ensuring appropriate credit in the traditional SIP process for all emissions reductions from measures implemented in the early action SIP if the area does not meet all the terms of the EAC; including meeting agreed-upon key milestones and is designated (or re-designated if necessary) according to the EPA's 8-hour ozone implementation guidelines. The EPA will offer such an area no delays, exemptions, or other favorable treatment because of its participation in the EAC.

8. Not allowing any area to renew their EAC after December 31, 2007, or initiate a new compact if it has previously forfeited its participation.

VI. Signatures

  
United States Environmental Protection Agency

Regional Administrator 12-30-02  
Title Date

R. Lenn Shan  
South Carolina  
Department of Health and Environmental Control

Deputy Commissioner 12/20/02  
Title Date

Gary A. Amick  
Newberry County Representative

County Administrator 12/18/02  
Title Date

**SOUTH CAROLINA'S 8-HOUR OZONE  
EARLY ACTION COMPACT  
Richland County**

The United States Environmental Protection Agency (EPA) has provided an option for areas currently meeting the 1-hour ozone standard, like those in South Carolina, to attain the 8-hour ozone standard by December 31, 2007, and obtain cleaner air sooner than federally mandated. This option offers a more expeditious time line for achieving emissions reductions than expected under the EPA's 8-hour ozone implementation rulemaking, while providing "fail-safe" provisions for the area to revert to the traditional State Implementation Plan (SIP) process if specific milestones are not met. Through the development of this Early Action Compact (EAC), local, state, and EPA officials agree to work together to develop and implement local and state early action plans. The plans will become a part of the state early action SIP to reduce ground-level ozone concentrations to comply with the 8-hour ozone standard by December 31, 2007, and maintain the standard beyond that date. Failure to meet the obligations outlined in this EAC will result in immediate reversion to the traditional non-attainment designation process as required in the Clean Air Act (CAA).

In an effort to provide this information to areas within South Carolina, the South Carolina Department of Health and Environmental Control (DHEC) held six public meetings throughout the state. The locations of the meetings were targeted to areas that could potentially be designated as non-attainment for the 8-hour ozone standard. The meetings were held in Columbia, Greenville, Florence, Rock Hill, Aiken and Charleston. EPA officials participated in five of the six meetings. The general public, local government representatives, industry representatives, and environmental interest groups attended the meetings. Prior to the meetings, DHEC issued a press release regarding the development of an early action SIP. Correspondence including a fact sheet was sent to all county administrators, Councils of Governments, Metropolitan Planning Organizations, public interest groups, industry representatives, other state agencies and others determined to be stakeholders in the process.

The Parties to this (EAC) are: Richland County, South Carolina Department of Health and Environmental Control (DHEC) and EPA.

**I. General Provisions**

- A. The parties commit to develop, implement and maintain the early action SIP (which includes the local early action plans) providing EPA defers the effective date of the non-attainment designation and related requirements as long as all conditions of the EAC and key milestones are met.
- B. If the potential area of non-attainment does not meet all the terms of the EAC, then it will forfeit its participation and will be subject to the full planning requirements under applicable CAA

traditional SIP processes including requirements defined as part of the EPA's 8-hour ozone implementation rulemaking.

- C. If the area has had the effective date of a non-attainment designation deferred and the area does not reach attainment of the standard by December 31, 2007, then the non-attainment designation will be effective. If the EPA's implementation schedule also requires a traditional SIP from areas on or before December 31, 2007, then a traditional SIP revision demonstrating attainment by the new attainment date will be due for the non-attainment area no later than December 31, 2008.
- D. Before formal adoption into the early action SIP, this agreement may be modified or terminated by mutual consent of all parties, or any party may withdraw from the agreement by notifying other parties in writing. If a party's withdrawal from the agreement prevents remaining signatories from satisfying any of the terms and milestones of the original agreement, the agreement will be void, any deferred effective date of the non-attainment designation would be withdrawn and the area's non-attainment designation would become effective soon after. Upon termination or withdrawal from the EAC, the area will be subject to the full planning requirements under applicable CAA traditional processes including requirements defined as part of the EPA's 8-hour ozone implementation rulemaking. The local government signatories will approve the local early action plans before submittal to DHEC for inclusion in the early action SIP. Once the local early action plan is incorporated into the early action SIP, any modifications will be treated as SIP revisions.
- E. Execution of this EAC by each Party shall be by signature of each Party's authorized representative. This agreement remains in effect until December 31, 2007.

## II. **Early Action Compact Requirements**

- A. **Milestones and Reporting**  
DHEC and local areas will assess progress towards developing and implementing the early action SIP and make a report available to EPA and the public every six months beginning in June 2003. As per EPA guidance, the key milestones for participation in the EAC are identified in the following table.

<b>Local Plan /Early Action SIP Milestones</b>		
<b>DATE</b>	<b>MILESTONE</b>	<b>RESPONSIBILITY</b>
<b>December 31, 2002</b>	EAC signed by all parties and submitted to EPA	Local/State/EPA
<b>June 16, 2003</b>	Discussion of control measures being considered to EPA	Local/State
<b>March 31, 2004</b>	Final local early action plan submitted to DHEC; copy to EPA	Local
<b>December 31, 2004</b>	Early Action State Implementation Plan submitted to EPA for incorporation into SIP	State
<b>April 1, 2005</b>	Local/State control strategies implemented no later than this date	Local/State
<b>September 30, 2005</b>	EPA takes final action on SIP submitted December 31, 2004	EPA
<b>June 30, 2006</b>	State submits progress report to EPA	State
<b>December 31, 2007</b>	Attainment of the 8-hour ozone standard	Local/State

B. Emissions Inventories

1. DHEC will be responsible for developing emissions inventories.
2. An initial modeling emissions inventory will be completed by December 31, 2002. This inventory includes:
  - a. Emissions modeling data for a 1998 episode that is representative of a typical ozone season exceedance that meets the EPA episode selection guidance;
  - b. MOBILE6 for determining on-road mobile emissions;
  - c. NONROAD model data; and,
  - d. Area source database utilizing population data allocated statewide.
3. A 2007 future year modeling emissions inventory will be developed by March 31, 2004. This inventory will sufficiently account for projected future growth in ozone precursor emissions through 2007, particularly from stationary, non-road and on-road mobile sources.
4. Additional inventories will be contingent upon legislative appropriations or other funding. Selection of specific episode inventories will be partially determined by the conceptual model, which reflects an analysis of meteorological conditions typical of high ozone events.
5. Emissions inventories will be compared and analyzed for trends in emission sources over time. The emissions inventory comparison and analysis will be completed by December 31, 2003.

C. Modeling

1. DHEC will be responsible for conducting the meteorological and air quality modeling analysis. DHEC will conduct the modeling analysis based on the "Draft Guidance on the use of Models and Other Analyses in Attainment Demonstrations for the 8-Hour Ozone NAAQS" (EPA-454/R-99-004, May 1999). The modeling will follow the guidance as facilitated by the EPA Regional Office.
2. Base case modeling will be completed by December 31, 2002. Future case modeling will be completed by October 31, 2003. One or more modeled control cases will be completed by January 31, 2004, with final revisions completed by March 31, 2004. All modeling will:
  - be SIP quality and perform within EPA's accepted margin of accuracy;
  - be carefully documented;
  - sufficiently account for projected future growth in ozone precursor emissions;
  - be accomplished by DHEC and reviewed by EPA; and,
  - be used to determine the effectiveness of NO<sub>x</sub> and/or VOC reductions. The control case(s) will be used to determine the relative effectiveness of different emission reduction strategies and to aid in the selection of appropriate emission reduction strategies.

D. Control Strategies

1. All adopted Federal and State control strategies that have been or will be implemented by the December 31, 2007, attainment date will be included in base, future and control case modeling.
2. Additional local and state control strategies under consideration will be identified by June 16, 2003. The local and state control strategies selected will be implemented as soon as practical, but no later than April 1, 2005.
3. Local and state control strategies will be specific, quantified, permanent and enforceable. The strategies will also include specific implementation dates and detailed documentation and reporting processes.
4. Voluntary strategies can play a supporting role in the local early action plan and the early action SIP. If emission reductions from voluntary strategies are quantified and credit is taken for them in the local early action plan or the early action SIP, those emission reductions will be enforceable. Additional strategies must be implemented to meet those quantified reduction requirements if quantified voluntary strategies fail. This is true for all quantified emission reductions.
5. Local and state control strategies will be designed and implemented with full stakeholder participation.

6. Local and state control strategies will be incorporated by DHEC into the early action SIP. In the event that the local area desires to add, delete or substitute strategies after early action SIP submittal, the local area will request a modification. Local early action plan modifications will be treated as SIP revisions and facilitated by DHEC.

E. Maintenance for Growth

1. The early action SIP will include a component to address emissions growth at least five years beyond December 31, 2007, ensuring that the areas will remain in attainment of the 8-hour ozone standard during that period. Attainment maintenance analysis will be completed by January 31, 2004, with final revisions completed by March 31, 2004. The analysis will employ one or more of the following or any other appropriate techniques necessary to make such a demonstration:
  - a. Modeling analysis showing ozone levels below the 8-hour ozone standard in 2012;
  - b. An annual review of growth (especially mobile and stationary source) to ensure control measures and growth assumptions are adequate;
  - c. Identification and quantification of federal, state, and/or local measures indicating sufficient reductions to offset growth estimates; or,
  - d. Any other appropriate techniques necessary to make such a determination.
2. The early action SIP must also detail a continuing planning process that includes modeling updates and modeling assumption verification (particularly growth assumptions). Modeling updates and planning processes must consider and evaluate the following:
  - a. All relevant actual new point sources;
  - b. Impacts from potential new source growth; and,
  - c. Future transportation patterns and their impact on air quality in a manner that is consistent with the most current adopted Long Range Transportation Plan and most current trend and projections of local motor vehicle emissions.
3. If the review of emissions growth in conjunction with the continuing planning process demonstrates that adopted emission reduction strategies are inadequate to address growth in emissions, additional measures will be added to the early action plan. Local planning processes should prepare for this possibility.
4. In the event that the continuing planning process identifies the need to add, delete, or substitute control strategies after the local early action plan has been incorporated into the early action SIP, the local area will initiate, and DHEC will facilitate a SIP revision to accommodate changes.

**F. Public Involvement**

1. Public involvement has been and will continue to be strongly encouraged during the planning and implementation process.
2. Public awareness programs will be used to provide opportunities for involvement in the planning process, implementation of control strategies, and any other issues important to the area.
3. Interested stakeholders (i.e., local, state, and federal government, citizens, public interest groups, and the business community) will continue to be involved in the planning process as early as possible. Planning meetings will be open to the public, with posted meeting times and locations. Early action SIP drafts will be publicly available, and the drafting process will have sufficient opportunities for comment from all interested stakeholders.
4. Opportunities for public comment on the proposed early action SIP will be provided and will follow the traditional SIP revision process as implemented by DHEC.
5. Semi-annual reports detailing, at a minimum, progress toward key milestones, will be made available to the public.
6. DHEC has established and will maintain a website for South Carolina's Early Action Plan for the 8-hour ozone standard, located at [www.scdhec.net/baq/eap.html](http://www.scdhec.net/baq/eap.html).

**III. Local Government Responsibilities**

The local governments agree to develop and implement a local early action plan that will promote the area's attainment by December 31, 2007, of the 8-hour ozone standard and maintenance until at least 2012. The local governments will develop this plan in coordination with the DHEC, EPA, stakeholders and the public. The local early action plan will include a process to evaluate the effectiveness and maintain long-term compliance with the standard.

After all adopted Federal and State controls that have been or will be implemented by the attainment date of December 31, 2007, are accounted for in the modeling, the local area must adopt additional local controls, as necessary to demonstrate attainment of the 8-hour ozone standard by December 31, 2007. Local controls under consideration must be identified and described by June 16, 2003. These measures must be included in the semi-annual report made available to the public.

The draft local early action plan will be submitted to DHEC by August 31, 2003. The final local early action plan will be submitted to DHEC, with a copy forwarded to EPA, by March 31, 2004. The adopted local early action plan will be included in the early action SIP due December 31, 2004.

In the event a development or issue arises that may impact performance or progress toward key milestones (including if a key milestone will be or has been missed and/or if a termination or modification has been requested), the responsible party will notify all other signatories in writing as soon as possible.

#### **IV. The South Carolina Department of Health and Environmental Control**

DHEC agrees to develop and implement a state early action SIP that will demonstrate the participating area's attainment by December 31, 2007, of the 8-hour ozone standard and maintenance until at least 2012. DHEC will develop this plan in coordination with the local governments, EPA, stakeholders and the public. The state early action SIP will include a process to monitor and maintain long-term compliance with the standard.

It is the responsibility of each state under the CAA to ensure attainment with all National Ambient Air Quality Standards. At any such time that an area is deemed non-attainment, the state will be required to develop a plan to return the area(s) to attainment in accordance with the CAA. If applicable, South Carolina is committed to working with adjacent states to assure mutual attainment of national standards.

In the event a development or issue arises that may impact performance or progress toward key milestones (including if a key milestone will be or has been missed and/or if a termination or modification has been requested), DHEC will notify all other signatories in writing as soon as possible.

DHEC will provide support to areas throughout the planning and implementation process by:

1. Developing emission inventories, modeling, trend analysis, and quantification and comparison of control measures.
2. Providing necessary information on all federal and state adopted emission reduction measures, which affect the area.
3. Providing technical and strategic assistance, as appropriate, in the selection and implementation of control strategies.
4. Providing technical and planning assistance in developing and implementing processes to address the impact of emissions growth beyond the attainment date.
5. Maintaining monitors and reporting and analysis of monitoring data.
6. Promoting public awareness efforts.
7. Coordinating communication between local areas and the EPA to facilitate continuing the EPA review of local work.
8. Ensuring expeditious review of local early action plan(s), and if deemed adequate, proposing modification of the early action SIP to adopt the early action plan.

9. Adopting control measures into the early action SIP as expeditiously as possible. The final complete early action SIP revision must be completed, adopted, and submitted by the state to the EPA by December 31, 2004.
10. Tracking progress. If any milestone is missed and EPA withdraws the deferred effective date, thereby triggering a non-attainment designation and applicable statutory requirements, the state will strive to submit a traditional non-attainment SIP within one year. However, due to the South Carolina legislative review process, it may take at least eighteen months.
11. Working concurrently with areas not electing to participate in the early action SIP process in preparing the traditional SIP submittal as required by the CAA.

## **V. The Environmental Protection Agency**

The EPA will participate by:

1. Recognizing the local area's and state's commitment to voluntarily adopt an early, substantive, enforceable, and scientifically-based attainment plan with early implementation of control measures by becoming a party to the EAC developed in conformance with South Carolina's Protocol for Early Action Compacts.
2. Providing technical assistance to the state(s) and local area(s) in the development of the early action plan.
3. Reviewing and approving the completed early action SIP by no later than September 30, 2005.
4. Deferring the effective date of non-attainment designation and related requirements for participating areas that fail to meet the 8-hour ozone standard as long as all terms and key milestones of the EAC are being met, including submission of the early action SIP revision by December 31, 2004.
5. Designating the area expeditiously as attainment and imposing no additional requirements, provided that the monitors in the area reflect attainment by December 31, 2007.
6. Taking action to withdraw the deferred effective date if the area violates the standard as of December 31, 2007, and the area has had the effective date of its non-attainment designation deferred. The area's non-attainment designation will become effective soon after.
7. Ensuring appropriate credit in the traditional SIP process for all emissions reductions from measures implemented in the early action SIP if the area does not meet all the terms of the EAC; including meeting agreed-upon key milestones and is designated (or re-designated if necessary) according to the EPA's 8-hour ozone implementation guidelines. The EPA will offer such an area no delays, exemptions, or other favorable treatment because of its participation in the EAC.

8. Not allowing any area to renew their EAC after December 31, 2007, or initiate a new compact if it has previously forfeited its participation.

VI. Signatures

  
United States Environmental Protection Agency

Regional Administrator 12-30-02  
Title Date

  
South Carolina  
Department of Health and Environmental Control

Deputy Commissioner 12/20/02  
Title Date

  
Richland County Representative

COUNTY ADMINISTRATOR 12/11/02  
Title Date

## **Low Country Area**

## **Local Early Action Compacts**

**December 2002**



**SOUTH CAROLINA'S 8-HOUR OZONE  
EARLY ACTION COMPACT  
Beaufort County**

The United States Environmental Protection Agency (EPA) has provided an option for areas currently meeting the 1-hour ozone standard, like those in South Carolina, to attain the 8-hour ozone standard by December 31, 2007, and obtain cleaner air sooner than federally mandated. This option offers a more expeditious time line for achieving emissions reductions than expected under the EPA's 8-hour ozone implementation rulemaking, while providing "fail-safe" provisions for the area to revert to the traditional State Implementation Plan (SIP) process if specific milestones are not met. Through the development of this Early Action Compact (EAC), local, state, and EPA officials agree to work together to develop and implement local and state early action plans. The plans will become a part of the state early action SIP to reduce ground-level ozone concentrations to comply with the 8-hour ozone standard by December 31, 2007, and maintain the standard beyond that date. Failure to meet the obligations outlined in this EAC will result in immediate reversion to the traditional non-attainment designation process as required in the Clean Air Act (CAA).

In an effort to provide this information to areas within South Carolina, the South Carolina Department of Health and Environmental Control (DHEC) held six public meetings throughout the state. The locations of the meetings were targeted to areas that could potentially be designated as non-attainment for the 8-hour ozone standard. The meetings were held in Columbia, Greenville, Florence, Rock Hill, Aiken and Charleston. EPA officials participated in five of the six meetings. The general public, local government representatives, industry representatives, and environmental interest groups attended the meetings. Prior to the meetings, DHEC issued a press release regarding the development of an early action SIP. Correspondence including a fact sheet was sent to all county administrators, Councils of Governments, Metropolitan Planning Organizations, public interest groups, industry representatives, other state agencies and others determined to be stakeholders in the process.

The Parties to this (EAC) are: Beaufort County, South Carolina Department of Health and Environmental Control (DHEC) and EPA.

**I. General Provisions**

- A. The parties commit to develop, implement and maintain the early action SIP (which includes the local early action plans) providing EPA defers the effective date of the non-attainment designation and related requirements as long as all conditions of the EAC and key milestones are met.
- B. If the potential area of non-attainment does not meet all the terms of the EAC, then it will forfeit its participation and will be subject to the full planning requirements under applicable CAA

traditional SIP processes including requirements defined as part of the EPA's 8-hour ozone implementation rulemaking.

- C. If the area has had the effective date of a non-attainment designation deferred and the area does not reach attainment of the standard by December 31, 2007, then the non-attainment designation will be effective. If the EPA's implementation schedule also requires a traditional SIP from areas on or before December 31, 2007, then a traditional SIP revision demonstrating attainment by the new attainment date will be due for the non-attainment area no later than December 31, 2008.
- D. Before formal adoption into the early action SIP, this agreement may be modified or terminated by mutual consent of all parties, or any party may withdraw from the agreement by notifying other parties in writing. If a party's withdrawal from the agreement prevents remaining signatories from satisfying any of the terms and milestones of the original agreement, the agreement will be void, any deferred effective date of the non-attainment designation would be withdrawn and the area's non-attainment designation would become effective soon after. Upon termination or withdrawal from the EAC, the area will be subject to the full planning requirements under applicable CAA traditional processes including requirements defined as part of the EPA's 8-hour ozone implementation rulemaking. The local government signatories will approve the local early action plans before submittal to DHEC for inclusion in the early action SIP. Once the local early action plan is incorporated into the early action SIP, any modifications will be treated as SIP revisions.
- E. Execution of this EAC by each Party shall be by signature of each Party's authorized representative. This agreement remains in effect until December 31, 2007.

## II. **Early Action Compact Requirements**

- A. **Milestones and Reporting**  
DHEC and local areas will assess progress towards developing and implementing the early action SIP and make a report available to EPA and the public every six months beginning in June 2003. As per EPA guidance, the key milestones for participation in the EAC are identified in the following table.

<b>Local Plan /Early Action SIP Milestones</b>		
<b>DATE</b>	<b>MILESTONE</b>	<b>RESPONSIBILITY</b>
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<b>June 16, 2003</b>	Discussion of control measures being considered to EPA	Local/State
<b>March 31, 2004</b>	Final local early action plan submitted to DHEC; copy to EPA	Local
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<b>April 1, 2005</b>	Local/State control strategies implemented no later than this date	Local/State
<b>September 30, 2005</b>	EPA takes final action on SIP submitted December 31, 2004	EPA
<b>June 30, 2006</b>	State submits progress report to EPA	State
<b>December 31, 2007</b>	Attainment of the 8-hour ozone standard	Local/State

**B. Emissions Inventories**

1. DHEC will be responsible for developing emissions inventories.
2. An initial modeling emissions inventory will be completed by December 31, 2002. This inventory includes:
  - a. Emissions modeling data for a 1998 episode that is representative of a typical ozone season exceedance that meets the EPA episode selection guidance;
  - b. MOBILE6 for determining on-road mobile emissions;
  - c. NONROAD model data; and,
  - d. Area source database utilizing population data allocated statewide.
3. A 2007 future year modeling emissions inventory will be developed by March 31, 2004. This inventory will sufficiently account for projected future growth in ozone precursor emissions through 2007, particularly from stationary, non-road and on-road mobile sources.
4. Additional inventories will be contingent upon legislative appropriations or other funding. Selection of specific episode inventories will be partially determined by the conceptual model, which reflects an analysis of meteorological conditions typical of high ozone events.
5. Emissions inventories will be compared and analyzed for trends in emission sources over time. The emissions inventory comparison and analysis will be completed by December 31, 2003.

C. Modeling

1. DHEC will be responsible for conducting the meteorological and air quality modeling analysis. DHEC will conduct the modeling analysis based on the "Draft Guidance on the use of Models and Other Analyses in Attainment Demonstrations for the 8-Hour Ozone NAAQS" (EPA-454/R-99-004, May 1999). The modeling will follow the guidance as facilitated by the EPA Regional Office.
2. Base case modeling will be completed by December 31, 2002. Future case modeling will be completed by October 31, 2003. One or more modeled control cases will be completed by January 31, 2004, with final revisions completed by March 31, 2004. All modeling will:
  - be SIP quality and perform within EPA's accepted margin of accuracy;
  - be carefully documented;
  - sufficiently account for projected future growth in ozone precursor emissions;
  - be accomplished by DHEC and reviewed by EPA; and,
  - be used to determine the effectiveness of NO<sub>x</sub> and/or VOC reductions. The control case(s) will be used to determine the relative effectiveness of different emission reduction strategies and to aid in the selection of appropriate emission reduction strategies.

D. Control Strategies

1. All adopted Federal and State control strategies that have been or will be implemented by the December 31, 2007, attainment date will be included in base, future and control case modeling.
2. Additional local and state control strategies under consideration will be identified by June 16, 2003. The local and state control strategies selected will be implemented as soon as practical, but no later than April 1, 2005.
3. Local and state control strategies will be specific, quantified, permanent and enforceable. The strategies will also include specific implementation dates and detailed documentation and reporting processes.
4. Voluntary strategies can play a supporting role in the local early action plan and the early action SIP. If emission reductions from voluntary strategies are quantified and credit is taken for them in the local early action plan or the early action SIP, those emission reductions will be enforceable. Additional strategies must be implemented to meet those quantified reduction requirements if quantified voluntary strategies fail. This is true for all quantified emission reductions.
5. Local and state control strategies will be designed and implemented with full stakeholder participation.

6. Local and state control strategies will be incorporated by DHEC into the early action SIP. In the event that the local area desires to add, delete or substitute strategies after early action SIP submittal, the local area will request a modification. Local early action plan modifications will be treated as SIP revisions and facilitated by DHEC.

E. Maintenance for Growth

1. The early action SIP will include a component to address emissions growth at least five years beyond December 31, 2007, ensuring that the areas will remain in attainment of the 8-hour ozone standard during that period. Attainment maintenance analysis will be completed by January 31, 2004, with final revisions completed by March 31, 2004. The analysis will employ one or more of the following or any other appropriate techniques necessary to make such a demonstration:
  - a. Modeling analysis showing ozone levels below the 8-hour ozone standard in 2012;
  - b. An annual review of growth (especially mobile and stationary source) to ensure control measures and growth assumptions are adequate;
  - c. Identification and quantification of federal, state, and/or local measures indicating sufficient reductions to offset growth estimates; or,
  - d. Any other appropriate techniques necessary to make such a determination.
2. The early action SIP must also detail a continuing planning process that includes modeling updates and modeling assumption verification (particularly growth assumptions). Modeling updates and planning processes must consider and evaluate the following:
  - a. All relevant actual new point sources;
  - b. Impacts from potential new source growth; and,
  - c. Future transportation patterns and their impact on air quality in a manner that is consistent with the most current adopted Long Range Transportation Plan and most current trend and projections of local motor vehicle emissions.
3. If the review of emissions growth in conjunction with the continuing planning process demonstrates that adopted emission reduction strategies are inadequate to address growth in emissions, additional measures will be added to the early action plan. Local planning processes should prepare for this possibility.
4. In the event that the continuing planning process identifies the need to add, delete, or substitute control strategies after the local early action plan has been incorporated into the early action SIP, the local area will initiate, and DHEC will facilitate a SIP revision to accommodate changes.

**F. Public Involvement**

1. Public involvement has been and will continue to be strongly encouraged during the planning and implementation process.
2. Public awareness programs will be used to provide opportunities for involvement in the planning process, implementation of control strategies, and any other issues important to the area.
3. Interested stakeholders (i.e., local, state, and federal government, citizens, public interest groups, and the business community) will continue to be involved in the planning process as early as possible. Planning meetings will be open to the public, with posted meeting times and locations. Early action SIP drafts will be publicly available, and the drafting process will have sufficient opportunities for comment from all interested stakeholders.
4. Opportunities for public comment on the proposed early action SIP will be provided and will follow the traditional SIP revision process as implemented by DHEC.
5. Semi-annual reports detailing, at a minimum, progress toward key milestones, will be made available to the public.
6. DHEC has established and will maintain a website for South Carolina's Early Action Plan for the 8-hour ozone standard, located at [www.scdhec.net/baq/eap.html](http://www.scdhec.net/baq/eap.html).

**III. Local Government Responsibilities**

The local governments agree to develop and implement a local early action plan that will promote the area's attainment by December 31, 2007, of the 8-hour ozone standard and maintenance until at least 2012. The local governments will develop this plan in coordination with the DHEC, EPA, stakeholders and the public. The local early action plan will include a process to evaluate the effectiveness and maintain long-term compliance with the standard.

After all adopted Federal and State controls that have been or will be implemented by the attainment date of December 31, 2007, are accounted for in the modeling, the local area must adopt additional local controls, as necessary to demonstrate attainment of the 8-hour ozone standard by December 31, 2007. Local controls under consideration must be identified and described by June 16, 2003. These measures must be included in the semi-annual report made available to the public.

The draft local early action plan will be submitted to DHEC by August 31, 2003. The final local early action plan will be submitted to DHEC, with a copy forwarded to EPA, by March 31, 2004. The adopted local early action plan will be included in the early action SIP due December 31, 2004.

In the event a development or issue arises that may impact performance or progress toward key milestones (including if a key milestone will be or has been missed and/or if a termination or modification has been requested), the responsible party will notify all other signatories in writing as soon as possible.

#### **IV. The South Carolina Department of Health and Environmental Control**

DHEC agrees to develop and implement a state early action SIP that will demonstrate the participating area's attainment by December 31, 2007, of the 8-hour ozone standard and maintenance until at least 2012. DHEC will develop this plan in coordination with the local governments, EPA, stakeholders and the public. The state early action SIP will include a process to monitor and maintain long-term compliance with the standard.

It is the responsibility of each state under the CAA to ensure attainment with all National Ambient Air Quality Standards. At any such time that an area is deemed non-attainment, the state will be required to develop a plan to return the area(s) to attainment in accordance with the CAA. If applicable, South Carolina is committed to working with adjacent states to assure mutual attainment of national standards.

In the event a development or issue arises that may impact performance or progress toward key milestones (including if a key milestone will be or has been missed and/or if a termination or modification has been requested), DHEC will notify all other signatories in writing as soon as possible.

DHEC will provide support to areas throughout the planning and implementation process by:

1. Developing emission inventories, modeling, trend analysis, and quantification and comparison of control measures.
2. Providing necessary information on all federal and state adopted emission reduction measures, which affect the area.
3. Providing technical and strategic assistance, as appropriate, in the selection and implementation of control strategies.
4. Providing technical and planning assistance in developing and implementing processes to address the impact of emissions growth beyond the attainment date.
5. Maintaining monitors and reporting and analysis of monitoring data.
6. Promoting public awareness efforts.
7. Coordinating communication between local areas and the EPA to facilitate continuing the EPA review of local work.
8. Ensuring expeditious review of local early action plan(s), and if deemed adequate, proposing modification of the early action SIP to adopt the early action plan.

9. Adopting control measures into the early action SIP as expeditiously as possible. The final complete early action SIP revision must be completed, adopted, and submitted by the state to the EPA by December 31, 2004.
10. Tracking progress. If any milestone is missed and EPA withdraws the deferred effective date, thereby triggering a non-attainment designation and applicable statutory requirements, the state will strive to submit a traditional non-attainment SIP within one year. However, due to the South Carolina legislative review process, it may take at least eighteen months.
11. Working concurrently with areas not electing to participate in the early action SIP process in preparing the traditional SIP submittal as required by the CAA.

## **V. The Environmental Protection Agency**

The EPA will participate by:

1. Recognizing the local area's and state's commitment to voluntarily adopt an early, substantive, enforceable, and scientifically-based attainment plan with early implementation of control measures by becoming a party to the EAC developed in conformance with South Carolina's Protocol for Early Action Compacts.
2. Providing technical assistance to the state(s) and local area(s) in the development of the early action plan.
3. Reviewing and approving the completed early action SIP by no later than September 30, 2005.
4. Deferring the effective date of non-attainment designation and related requirements for participating areas that fail to meet the 8-hour ozone standard as long as all terms and key milestones of the EAC are being met, including submission of the early action SIP revision by December 31, 2004.
5. Designating the area expeditiously as attainment and imposing no additional requirements, provided that the monitors in the area reflect attainment by December 31, 2007.
6. Taking action to withdraw the deferred effective date if the area violates the standard as of December 31, 2007, and the area has had the effective date of its non-attainment designation deferred. The area's non-attainment designation will become effective soon after.
7. Ensuring appropriate credit in the traditional SIP process for all emissions reductions from measures implemented in the early action SIP if the area does not meet all the terms of the EAC; including meeting agreed-upon key milestones and is designated (or re-designated if necessary) according to the EPA's 8-hour ozone implementation guidelines. The EPA will offer such an area no delays, exemptions, or other favorable treatment because of its participation in the EAC.

8. Not allowing any area to renew their EAC after December 31, 2007, or initiate a new compact if it has previously forfeited its participation.

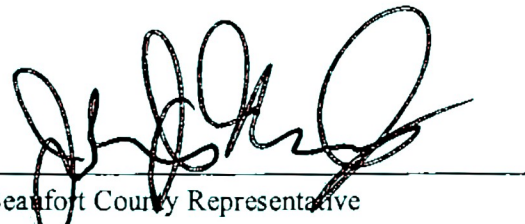
VI. Signatures

  
United States Environmental Protection Agency

Regional Administrator 12-30-02  
Title Date

R. Lenn Shan  
South Carolina  
Department of Health and Environmental Control

Deputy Commissioner 12/20/02  
Title Date

  
Beaufort County Representative

County Administrator Dec 18, 02  
Title Date

**SOUTH CAROLINA'S 8-HOUR OZONE  
EARLY ACTION COMPACT  
Colleton County**

The United States Environmental Protection Agency (EPA) has provided an option for areas currently meeting the 1-hour ozone standard, like those in South Carolina, to attain the 8-hour ozone standard by December 31, 2007, and obtain cleaner air sooner than federally mandated. This option offers a more expeditious time line for achieving emissions reductions than expected under the EPA's 8-hour ozone implementation rulemaking, while providing "fail-safe" provisions for the area to revert to the traditional State Implementation Plan (SIP) process if specific milestones are not met. Through the development of this Early Action Compact (EAC), local, state, and EPA officials agree to work together to develop and implement local and state early action plans. The plans will become a part of the state early action SIP to reduce ground-level ozone concentrations to comply with the 8-hour ozone standard by December 31, 2007, and maintain the standard beyond that date. Failure to meet the obligations outlined in this EAC will result in immediate reversion to the traditional non-attainment designation process as required in the Clean Air Act (CAA).

In an effort to provide this information to areas within South Carolina, the South Carolina Department of Health and Environmental Control (DHEC) held six public meetings throughout the state. The locations of the meetings were targeted to areas that could potentially be designated as non-attainment for the 8-hour ozone standard. The meetings were held in Columbia, Greenville, Florence, Rock Hill, Aiken and Charleston. EPA officials participated in five of the six meetings. The general public, local government representatives, industry representatives, and environmental interest groups attended the meetings. Prior to the meetings, DHEC issued a press release regarding the development of an early action SIP. Correspondence including a fact sheet was sent to all county administrators, Councils of Governments, Metropolitan Planning Organizations, public interest groups, industry representatives, other state agencies and others determined to be stakeholders in the process.

The Parties to this (EAC) are: Colleton County, South Carolina Department of Health and Environmental Control (DHEC) and EPA.

**I. General Provisions**

- A. The parties commit to develop, implement and maintain the early action SIP (which includes the local early action plans) providing EPA defers the effective date of the non-attainment designation and related requirements as long as all conditions of the EAC and key milestones are met.
- B. If the potential area of non-attainment does not meet all the terms of the EAC, then it will forfeit its participation and will be subject to the full planning requirements under applicable CAA

traditional SIP processes including requirements defined as part of the EPA's 8-hour ozone implementation rulemaking.

- C. If the area has had the effective date of a non-attainment designation deferred and the area does not reach attainment of the standard by December 31, 2007, then the non-attainment designation will be effective. If the EPA's implementation schedule also requires a traditional SIP from areas on or before December 31, 2007, then a traditional SIP revision demonstrating attainment by the new attainment date will be due for the non-attainment area no later than December 31, 2008.
- D. Before formal adoption into the early action SIP, this agreement may be modified or terminated by mutual consent of all parties, or any party may withdraw from the agreement by notifying other parties in writing. If a party's withdrawal from the agreement prevents remaining signatories from satisfying any of the terms and milestones of the original agreement, the agreement will be void, any deferred effective date of the non-attainment designation would be withdrawn and the area's non-attainment designation would become effective soon after. Upon termination or withdrawal from the EAC, the area will be subject to the full planning requirements under applicable CAA traditional processes including requirements defined as part of the EPA's 8-hour ozone implementation rulemaking. The local government signatories will approve the local early action plans before submittal to DHEC for inclusion in the early action SIP. Once the local early action plan is incorporated into the early action SIP, any modifications will be treated as SIP revisions.
- E. Execution of this EAC by each Party shall be by signature of each Party's authorized representative. This agreement remains in effect until December 31, 2007.

## II. **Early Action Compact Requirements**

- A. **Milestones and Reporting**  
DHEC and local areas will assess progress towards developing and implementing the early action SIP and make a report available to EPA and the public every six months beginning in June 2003. As per EPA guidance, the key milestones for participation in the EAC are identified in the following table.

<b>Local Plan /Early Action SIP Milestones</b>		
<b>DATE</b>	<b>MILESTONE</b>	<b>RESPONSIBILITY</b>
<b>December 31, 2002</b>	EAC signed by all parties and submitted to EPA	Local/State/EPA
<b>June 16, 2003</b>	Discussion of control measures being considered to EPA	Local/State
<b>March 31, 2004</b>	Final local early action plan submitted to DHEC; copy to EPA	Local
<b>December 31, 2004</b>	Early Action State Implementation Plan submitted to EPA for incorporation into SIP	State
<b>April 1, 2005</b>	Local/State control strategies implemented no later than this date	Local/State
<b>September 30, 2005</b>	EPA takes final action on SIP submitted December 31, 2004	EPA
<b>June 30, 2006</b>	State submits progress report to EPA	State
<b>December 31, 2007</b>	Attainment of the 8-hour ozone standard	Local/State

**B. Emissions Inventories**

1. DHEC will be responsible for developing emissions inventories.
2. An initial modeling emissions inventory will be completed by December 31, 2002. This inventory includes:
  - a. Emissions modeling data for a 1998 episode that is representative of a typical ozone season exceedance that meets the EPA episode selection guidance;
  - b. MOBILE6 for determining on-road mobile emissions;
  - c. NONROAD model data; and,
  - d. Area source database utilizing population data allocated statewide.
3. A 2007 future year modeling emissions inventory will be developed by March 31, 2004. This inventory will sufficiently account for projected future growth in ozone precursor emissions through 2007, particularly from stationary, non-road and on-road mobile sources.
4. Additional inventories will be contingent upon legislative appropriations or other funding. Selection of specific episode inventories will be partially determined by the conceptual model, which reflects an analysis of meteorological conditions typical of high ozone events.
5. Emissions inventories will be compared and analyzed for trends in emission sources over time. The emissions inventory comparison and analysis will be completed by December 31, 2003.

C. Modeling

1. DHEC will be responsible for conducting the meteorological and air quality modeling analysis. DHEC will conduct the modeling analysis based on the "Draft Guidance on the use of Models and Other Analyses in Attainment Demonstrations for the 8-Hour Ozone NAAQS" (EPA-454/R-99-004, May 1999). The modeling will follow the guidance as facilitated by the EPA Regional Office.
2. Base case modeling will be completed by December 31, 2002. Future case modeling will be completed by October 31, 2003. One or more modeled control cases will be completed by January 31, 2004, with final revisions completed by March 31, 2004. All modeling will:
  - be SIP quality and perform within EPA's accepted margin of accuracy;
  - be carefully documented;
  - sufficiently account for projected future growth in ozone precursor emissions;
  - be accomplished by DHEC and reviewed by EPA; and,
  - be used to determine the effectiveness of NO<sub>x</sub> and/or VOC reductions. The control case(s) will be used to determine the relative effectiveness of different emission reduction strategies and to aid in the selection of appropriate emission reduction strategies.

D. Control Strategies

1. All adopted Federal and State control strategies that have been or will be implemented by the December 31, 2007, attainment date will be included in base, future and control case modeling.
2. Additional local and state control strategies under consideration will be identified by June 16, 2003. The local and state control strategies selected will be implemented as soon as practical, but no later than April 1, 2005.
3. Local and state control strategies will be specific, quantified, permanent and enforceable. The strategies will also include specific implementation dates and detailed documentation and reporting processes.
4. Voluntary strategies can play a supporting role in the local early action plan and the early action SIP. If emission reductions from voluntary strategies are quantified and credit is taken for them in the local early action plan or the early action SIP, those emission reductions will be enforceable. Additional strategies must be implemented to meet those quantified reduction requirements if quantified voluntary strategies fail. This is true for all quantified emission reductions.
5. Local and state control strategies will be designed and implemented with full stakeholder participation.

6. Local and state control strategies will be incorporated by DHEC into the early action SIP. In the event that the local area desires to add, delete or substitute strategies after early action SIP submittal, the local area will request a modification. Local early action plan modifications will be treated as SIP revisions and facilitated by DHEC.

E. Maintenance for Growth

1. The early action SIP will include a component to address emissions growth at least five years beyond December 31, 2007, ensuring that the areas will remain in attainment of the 8-hour ozone standard during that period. Attainment maintenance analysis will be completed by January 31, 2004, with final revisions completed by March 31, 2004. The analysis will employ one or more of the following or any other appropriate techniques necessary to make such a demonstration:
  - a. Modeling analysis showing ozone levels below the 8-hour ozone standard in 2012;
  - b. An annual review of growth (especially mobile and stationary source) to ensure control measures and growth assumptions are adequate;
  - c. Identification and quantification of federal, state, and/or local measures indicating sufficient reductions to offset growth estimates; or,
  - d. Any other appropriate techniques necessary to make such a determination.
2. The early action SIP must also detail a continuing planning process that includes modeling updates and modeling assumption verification (particularly growth assumptions). Modeling updates and planning processes must consider and evaluate the following:
  - a. All relevant actual new point sources;
  - b. Impacts from potential new source growth; and,
  - c. Future transportation patterns and their impact on air quality in a manner that is consistent with the most current adopted Long Range Transportation Plan and most current trend and projections of local motor vehicle emissions.
3. If the review of emissions growth in conjunction with the continuing planning process demonstrates that adopted emission reduction strategies are inadequate to address growth in emissions, additional measures will be added to the early action plan. Local planning processes should prepare for this possibility.
4. In the event that the continuing planning process identifies the need to add, delete, or substitute control strategies after the local early action plan has been incorporated into the early action SIP, the local area will initiate, and DHEC will facilitate a SIP revision to accommodate changes.

**F. Public Involvement**

1. Public involvement has been and will continue to be strongly encouraged during the planning and implementation process.
2. Public awareness programs will be used to provide opportunities for involvement in the planning process, implementation of control strategies, and any other issues important to the area.
3. Interested stakeholders (i.e., local, state, and federal government, citizens, public interest groups, and the business community) will continue to be involved in the planning process as early as possible. Planning meetings will be open to the public, with posted meeting times and locations. Early action SIP drafts will be publicly available, and the drafting process will have sufficient opportunities for comment from all interested stakeholders.
4. Opportunities for public comment on the proposed early action SIP will be provided and will follow the traditional SIP revision process as implemented by DHEC.
5. Semi-annual reports detailing, at a minimum, progress toward key milestones, will be made available to the public.
6. DHEC has established and will maintain a website for South Carolina's Early Action Plan for the 8-hour ozone standard, located at [www.scdhec.net/baq/eap.html](http://www.scdhec.net/baq/eap.html).

**III. Local Government Responsibilities**

The local governments agree to develop and implement a local early action plan that will promote the area's attainment by December 31, 2007, of the 8-hour ozone standard and maintenance until at least 2012. The local governments will develop this plan in coordination with the DHEC, EPA, stakeholders and the public. The local early action plan will include a process to evaluate the effectiveness and maintain long-term compliance with the standard.

After all adopted Federal and State controls that have been or will be implemented by the attainment date of December 31, 2007, are accounted for in the modeling, the local area must adopt additional local controls, as necessary to demonstrate attainment of the 8-hour ozone standard by December 31, 2007. Local controls under consideration must be identified and described by June 16, 2003. These measures must be included in the semi-annual report made available to the public.

The draft local early action plan will be submitted to DHEC by August 31, 2003. The final local early action plan will be submitted to DHEC, with a copy forwarded to EPA, by March 31, 2004. The adopted local early action plan will be included in the early action SIP due December 31, 2004.

In the event a development or issue arises that may impact performance or progress toward key milestones (including if a key milestone will be or has been missed and/or if a termination or modification has been requested), the responsible party will notify all other signatories in writing as soon as possible.

#### **IV. The South Carolina Department of Health and Environmental Control**

DHEC agrees to develop and implement a state early action SIP that will demonstrate the participating area's attainment by December 31, 2007, of the 8-hour ozone standard and maintenance until at least 2012. DHEC will develop this plan in coordination with the local governments, EPA, stakeholders and the public. The state early action SIP will include a process to monitor and maintain long-term compliance with the standard.

It is the responsibility of each state under the CAA to ensure attainment with all National Ambient Air Quality Standards. At any such time that an area is deemed non-attainment, the state will be required to develop a plan to return the area(s) to attainment in accordance with the CAA. If applicable, South Carolina is committed to working with adjacent states to assure mutual attainment of national standards.

In the event a development or issue arises that may impact performance or progress toward key milestones (including if a key milestone will be or has been missed and/or if a termination or modification has been requested), DHEC will notify all other signatories in writing as soon as possible.

DHEC will provide support to areas throughout the planning and implementation process by:

1. Developing emission inventories, modeling, trend analysis, and quantification and comparison of control measures.
2. Providing necessary information on all federal and state adopted emission reduction measures, which affect the area.
3. Providing technical and strategic assistance, as appropriate, in the selection and implementation of control strategies.
4. Providing technical and planning assistance in developing and implementing processes to address the impact of emissions growth beyond the attainment date.
5. Maintaining monitors and reporting and analysis of monitoring data.
6. Promoting public awareness efforts.
7. Coordinating communication between local areas and the EPA to facilitate continuing the EPA review of local work.
8. Ensuring expeditious review of local early action plan(s), and if deemed adequate, proposing modification of the early action SIP to adopt the early action plan.

9. Adopting control measures into the early action SIP as expeditiously as possible. The final complete early action SIP revision must be completed, adopted, and submitted by the state to the EPA by December 31, 2004.
10. Tracking progress. If any milestone is missed and EPA withdraws the deferred effective date, thereby triggering a non-attainment designation and applicable statutory requirements, the state will strive to submit a traditional non-attainment SIP within one year. However, due to the South Carolina legislative review process, it may take at least eighteen months.
11. Working concurrently with areas not electing to participate in the early action SIP process in preparing the traditional SIP submittal as required by the CAA.

## **V. The Environmental Protection Agency**


The EPA will participate by:

1. Recognizing the local area's and state's commitment to voluntarily adopt an early, substantive, enforceable, and scientifically-based attainment plan with early implementation of control measures by becoming a party to the EAC developed in conformance with South Carolina's Protocol for Early Action Compacts.
2. Providing technical assistance to the state(s) and local area(s) in the development of the early action plan.
3. Reviewing and approving the completed early action SIP by no later than September 30, 2005.
4. Deferring the effective date of non-attainment designation and related requirements for participating areas that fail to meet the 8-hour ozone standard as long as all terms and key milestones of the EAC are being met, including submission of the early action SIP revision by December 31, 2004.
5. Designating the area expeditiously as attainment and imposing no additional requirements, provided that the monitors in the area reflect attainment by December 31, 2007.
6. Taking action to withdraw the deferred effective date if the area violates the standard as of December 31, 2007, and the area has had the effective date of its non-attainment designation deferred. The area's non-attainment designation will become effective soon after.
7. Ensuring appropriate credit in the traditional SIP process for all emissions reductions from measures implemented in the early action SIP if the area does not meet all the terms of the EAC; including meeting agreed-upon key milestones and is designated (or re-designated if necessary) according to the EPA's 8-hour ozone implementation guidelines. The EPA will offer such an area no delays, exemptions, or other favorable treatment because of its participation in the EAC.

8. Not allowing any area to renew their EAC after December 31, 2007, or initiate a new compact if it has previously forfeited its participation.

VI. Signatures

 Regional Administrator 12-30-02  
United States Environmental Protection Agency Title Date

 Deputy Commissioner 12/20/02  
South Carolina Title Date  
Department of Health and Environmental Control

 COUNCIL CHAIRMAN 12-5-02  
Colleton County Representative Title Date

**SOUTH CAROLINA'S 8-HOUR OZONE  
EARLY ACTION COMPACT**  
Hampton County

The United States Environmental Protection Agency (EPA) has provided an option for areas currently meeting the 1-hour ozone standard, like those in South Carolina, to attain the 8-hour ozone standard by December 31, 2007, and obtain cleaner air sooner than federally mandated. This option offers a more expeditious time line for achieving emissions reductions than expected under the EPA's 8-hour ozone implementation rulemaking, while providing "fail-safe" provisions for the area to revert to the traditional State Implementation Plan (SIP) process if specific milestones are not met. Through the development of this Early Action Compact (EAC), local, state, and EPA officials agree to work together to develop and implement local and state early action plans. The plans will become a part of the state early action SIP to reduce ground-level ozone concentrations to comply with the 8-hour ozone standard by December 31, 2007, and maintain the standard beyond that date. Failure to meet the obligations outlined in this EAC will result in immediate reversion to the traditional non-attainment designation process as required in the Clean Air Act (CAA).

In an effort to provide this information to areas within South Carolina, the South Carolina Department of Health and Environmental Control (DHEC) held six public meetings throughout the state. The locations of the meetings were targeted to areas that could potentially be designated as non-attainment for the 8-hour ozone standard. The meetings were held in Columbia, Greenville, Florence, Rock Hill, Aiken and Charleston. EPA officials participated in five of the six meetings. The general public, local government representatives, industry representatives, and environmental interest groups attended the meetings. Prior to the meetings, DHEC issued a press release regarding the development of an early action SIP. Correspondence including a fact sheet was sent to all county administrators, Councils of Governments, Metropolitan Planning Organizations, public interest groups, industry representatives, other state agencies and others determined to be stakeholders in the process.

The Parties to this EAC are: Hampton County, South Carolina Department of Health and Environmental Control (DHEC) and EPA.

**I. General Provisions**

- A. The parties commit to develop, implement and maintain the early action SIP (which includes the local early action plans) providing EPA defers the effective date of the non-attainment designation and related requirements as long as all conditions of the EAC and key milestones are met.
- B. If the potential area of non-attainment does not meet all the terms of the EAC, then it will forfeit its participation and will be subject to the full planning requirements under applicable CAA

traditional SIP processes including requirements defined as part of the EPA's 8-hour ozone implementation rulemaking.

- C. If the area has had the effective date of a non-attainment designation deferred and the area does not reach attainment of the standard by December 31, 2007, then the non-attainment designation will be effective. If the EPA's implementation schedule also requires a traditional SIP from areas on or before December 31, 2007, then a traditional SIP revision demonstrating attainment by the new attainment date will be due for the non-attainment area no later than December 31, 2008.
- D. Before formal adoption into the early action SIP, this agreement may be modified or terminated by mutual consent of all parties, or any party may withdraw from the agreement by notifying other parties in writing. If a party's withdrawal from the agreement prevents remaining signatories from satisfying any of the terms and milestones of the original agreement, the agreement will be void, any deferred effective date of the non-attainment designation would be withdrawn and the area's non-attainment designation would become effective soon after. Upon termination or withdrawal from the EAC, the area will be subject to the full planning requirements under applicable CAA traditional processes including requirements defined as part of the EPA's 8-hour ozone implementation rulemaking. The local government signatories will approve the local early action plans before submittal to DHEC for inclusion in the early action SIP. Once the local early action plan is incorporated into the early action SIP, any modifications will be treated as SIP revisions.
- E. Execution of this EAC by each Party shall be by signature of each Party's authorized representative. This agreement remains in effect until December 31, 2007.

## II. **Early Action Compact Requirements**

- A. **Milestones and Reporting**  
DHEC and local areas will assess progress towards developing and implementing the early action SIP and make a report available to EPA and the public every six months beginning in June 2003. As per EPA guidance, the key milestones for participation in the EAC are identified in the following table.

<b>Local Plan /Early Action SIP Milestones</b>		
<b>DATE</b>	<b>MILESTONE</b>	<b>RESPONSIBILITY</b>
<b>December 31, 2002</b>	EAC signed by all parties and submitted to EPA	Local/State/EPA
<b>June 16, 2003</b>	Discussion of control measures being considered to EPA	Local/State
<b>March 31, 2004</b>	Final local early action plan submitted to DHEC; copy to EPA	Local
<b>December 31, 2004</b>	Early Action State Implementation Plan submitted to EPA for incorporation into SIP	State
<b>April 1, 2005</b>	Local/State control strategies implemented no later than this date	Local/State
<b>September 30, 2005</b>	EPA takes final action on SIP submitted December 31, 2004	EPA
<b>June 30, 2006</b>	State submits progress report to EPA	State
<b>December 31, 2007</b>	Attainment of the 8-hour ozone standard	Local/State

**B. Emissions Inventories**

1. DHEC will be responsible for developing emissions inventories.
2. An initial modeling emissions inventory will be completed by December 31, 2002. This inventory includes:
  - a. Emissions modeling data for a 1998 episode that is representative of a typical ozone season exceedance that meets the EPA episode selection guidance;
  - b. MOBILE6 for determining on-road mobile emissions;
  - c. NONROAD model data; and,
  - d. Area source database utilizing population data allocated statewide.
3. A 2007 future year modeling emissions inventory will be developed by March 31, 2004. This inventory will sufficiently account for projected future growth in ozone precursor emissions through 2007, particularly from stationary, non-road and on-road mobile sources.
4. Additional inventories will be contingent upon legislative appropriations or other funding. Selection of specific episode inventories will be partially determined by the conceptual model, which reflects an analysis of meteorological conditions typical of high ozone events.
5. Emissions inventories will be compared and analyzed for trends in emission sources over time. The emissions inventory comparison and analysis will be completed by December 31, 2003.

C. Modeling

1. DHEC will be responsible for conducting the meteorological and air quality modeling analysis. DHEC will conduct the modeling analysis based on the "Draft Guidance on the use of Models and Other Analyses in Attainment Demonstrations for the 8-Hour Ozone NAAQS" (EPA-454/R-99-004, May 1999). The modeling will follow the guidance as facilitated by the EPA Regional Office.
2. Base case modeling will be completed by December 31, 2002. Future case modeling will be completed by October 31, 2003. One or more modeled control cases will be completed by January 31, 2004, with final revisions completed by March 31, 2004. All modeling will:
  - be SIP quality and perform within EPA's accepted margin of accuracy;
  - be carefully documented;
  - sufficiently account for projected future growth in ozone precursor emissions;
  - be accomplished by DHEC and reviewed by EPA; and,
  - be used to determine the effectiveness of NO<sub>x</sub> and/or VOC reductions. The control case(s) will be used to determine the relative effectiveness of different emission reduction strategies and to aid in the selection of appropriate emission reduction strategies.

D. Control Strategies

1. All adopted Federal and State control strategies that have been or will be implemented by the December 31, 2007, attainment date will be included in base, future and control case modeling.
2. Additional local and state control strategies under consideration will be identified by June 16, 2003. The local and state control strategies selected will be implemented as soon as practical, but no later than April 1, 2005.
3. Local and state control strategies will be specific, quantified, permanent and enforceable. The strategies will also include specific implementation dates and detailed documentation and reporting processes.
4. Voluntary strategies can play a supporting role in the local early action plan and the early action SIP. If emission reductions from voluntary strategies are quantified and credit is taken for them in the local early action plan or the early action SIP, those emission reductions will be enforceable. Additional strategies must be implemented to meet those quantified reduction requirements if quantified voluntary strategies fail. This is true for all quantified emission reductions.
5. Local and state control strategies will be designed and implemented with full stakeholder participation.

6. Local and state control strategies will be incorporated by DHEC into the early action SIP. In the event that the local area desires to add, delete or substitute strategies after early action SIP submittal, the local area will request a modification. Local early action plan modifications will be treated as SIP revisions and facilitated by DHEC.

E. Maintenance for Growth

1. The early action SIP will include a component to address emissions growth at least five years beyond December 31, 2007, ensuring that the areas will remain in attainment of the 8-hour ozone standard during that period. Attainment maintenance analysis will be completed by January 31, 2004, with final revisions completed by March 31, 2004. The analysis will employ one or more of the following or any other appropriate techniques necessary to make such a demonstration:
  - a. Modeling analysis showing ozone levels below the 8-hour ozone standard in 2012;
  - b. An annual review of growth (especially mobile and stationary source) to ensure control measures and growth assumptions are adequate;
  - c. Identification and quantification of federal, state, and/or local measures indicating sufficient reductions to offset growth estimates; or,
  - d. Any other appropriate techniques necessary to make such a determination.
2. The early action SIP must also detail a continuing planning process that includes modeling updates and modeling assumption verification (particularly growth assumptions). Modeling updates and planning processes must consider and evaluate the following:
  - a. All relevant actual new point sources;
  - b. Impacts from potential new source growth; and,
  - c. Future transportation patterns and their impact on air quality in a manner that is consistent with the most current adopted Long Range Transportation Plan and most current trend and projections of local motor vehicle emissions.
3. If the review of emissions growth in conjunction with the continuing planning process demonstrates that adopted emission reduction strategies are inadequate to address growth in emissions, additional measures will be added to the early action plan. Local planning processes should prepare for this possibility.
4. In the event that the continuing planning process identifies the need to add, delete, or substitute control strategies after the local early action plan has been incorporated into the early action SIP, the local area will initiate, and DHEC will facilitate a SIP revision to accommodate changes.

**F. Public Involvement**

1. Public involvement has been and will continue to be strongly encouraged during the planning and implementation process.
2. Public awareness programs will be used to provide opportunities for involvement in the planning process, implementation of control strategies, and any other issues important to the area.
3. Interested stakeholders (i.e., local, state, and federal government, citizens, public interest groups, and the business community) will continue to be involved in the planning process as early as possible. Planning meetings will be open to the public, with posted meeting times and locations. Early action SIP drafts will be publicly available, and the drafting process will have sufficient opportunities for comment from all interested stakeholders.
4. Opportunities for public comment on the proposed early action SIP will be provided and will follow the traditional SIP revision process as implemented by DHEC.
5. Semi-annual reports detailing, at a minimum, progress toward key milestones, will be made available to the public.
6. DHEC has established and will maintain a website for South Carolina's Early Action Plan for the 8-hour ozone standard, located at [www.scdhec.net/baq/eap.html](http://www.scdhec.net/baq/eap.html).

**III. Local Government Responsibilities**

The local governments agree to develop and implement a local early action plan that will promote the area's attainment by December 31, 2007, of the 8-hour ozone standard and maintenance until at least 2012. The local governments will develop this plan in coordination with the DHEC, EPA, stakeholders and the public. The local early action plan will include a process to evaluate the effectiveness and maintain long-term compliance with the standard.

After all adopted Federal and State controls that have been or will be implemented by the attainment date of December 31, 2007, are accounted for in the modeling, the local area must adopt additional local controls, as necessary to demonstrate attainment of the 8-hour ozone standard by December 31, 2007. Local controls under consideration must be identified and described by June 16, 2003. These measures must be included in the semi-annual report made available to the public.

The draft local early action plan will be submitted to DHEC by August 31, 2003. The final local early action plan will be submitted to DHEC, with a copy forwarded to EPA, by March 31, 2004. The adopted local early action plan will be included in the early action SIP due December 31, 2004.

In the event a development or issue arises that may impact performance or progress toward key milestones (including if a key milestone will be or has been missed and/or if a termination or modification has been requested), the responsible party will notify all other signatories in writing as soon as possible.

#### **IV. The South Carolina Department of Health and Environmental Control**

DHEC agrees to develop and implement a state early action SIP that will demonstrate the participating area's attainment by December 31, 2007, of the 8-hour ozone standard and maintenance until at least 2012. DHEC will develop this plan in coordination with the local governments, EPA, stakeholders and the public. The state early action SIP will include a process to monitor and maintain long-term compliance with the standard.

It is the responsibility of each state under the CAA to ensure attainment with all National Ambient Air Quality Standards. At any such time that an area is deemed non-attainment, the state will be required to develop a plan to return the area(s) to attainment in accordance with the CAA. If applicable, South Carolina is committed to working with adjacent states to assure mutual attainment of national standards.

In the event a development or issue arises that may impact performance or progress toward key milestones (including if a key milestone will be or has been missed and/or if a termination or modification has been requested), DHEC will notify all other signatories in writing as soon as possible.

DHEC will provide support to areas throughout the planning and implementation process by:

1. Developing emission inventories, modeling, trend analysis, and quantification and comparison of control measures.
2. Providing necessary information on all federal and state adopted emission reduction measures, which affect the area.
3. Providing technical and strategic assistance, as appropriate, in the selection and implementation of control strategies.
4. Providing technical and planning assistance in developing and implementing processes to address the impact of emissions growth beyond the attainment date.
5. Maintaining monitors and reporting and analysis of monitoring data.
6. Promoting public awareness efforts.
7. Coordinating communication between local areas and the EPA to facilitate continuing the EPA review of local work.
8. Ensuring expeditious review of local early action plan(s), and if deemed adequate, proposing modification of the early action SIP to adopt the early action plan.

9. Adopting control measures into the early action SIP as expeditiously as possible. The final complete early action SIP revision must be completed, adopted, and submitted by the state to the EPA by December 31, 2004.
10. Tracking progress. If any milestone is missed and EPA withdraws the deferred effective date, thereby triggering a non-attainment designation and applicable statutory requirements, the state will strive to submit a traditional non-attainment SIP within one year. However, due to the South Carolina legislative review process, it may take at least eighteen months.
11. Working concurrently with areas not electing to participate in the early action SIP process in preparing the traditional SIP submittal as required by the CAA.

## **V. The Environmental Protection Agency**

The EPA will participate by:

1. Recognizing the local area's and state's commitment to voluntarily adopt an early, substantive, enforceable, and scientifically-based attainment plan with early implementation of control measures by becoming a party to the EAC developed in conformance with South Carolina's Protocol for Early Action Compacts.
2. Providing technical assistance to the state(s) and local area(s) in the development of the early action plan.
3. Reviewing and approving the completed early action SIP by no later than September 30, 2005.
4. Deferring the effective date of non-attainment designation and related requirements for participating areas that fail to meet the 8-hour ozone standard as long as all terms and key milestones of the EAC are being met, including submission of the early action SIP revision by December 31, 2004.
5. Designating the area expeditiously as attainment and imposing no additional requirements, provided that the monitors in the area reflect attainment by December 31, 2007.
6. Taking action to withdraw the deferred effective date if the area violates the standard as of December 31, 2007, and the area has had the effective date of its non-attainment designation deferred. The area's non-attainment designation will become effective soon after.
7. Ensuring appropriate credit in the traditional SIP process for all emissions reductions from measures implemented in the early action SIP if the area does not meet all the terms of the EAC; including meeting agreed-upon key milestones and is designated (or re-designated if necessary) according to the EPA's 8-hour ozone implementation guidelines. The EPA will offer such an area no delays, exemptions, or other favorable treatment because of its participation in the EAC.

8. Not allowing any area to renew their EAC after December 31, 2007, or initiate a new compact if it has previously forfeited its participation.

VI. Signatures

  
United States Environmental Protection Agency

Regional Administrator 12-30-02  
Title Date

R. Lewis Khan  
South Carolina  
Department of Health and Environmental Control

Deputy Commissioner 12/20/02  
Title Date

  
Hampton County Representative

Interim Administrator 12-20-02  
Title Date

**SOUTH CAROLINA'S 8-HOUR OZONE  
EARLY ACTION COMPACT  
Jasper County**

The United States Environmental Protection Agency (EPA) has provided an option for areas currently meeting the 1-hour ozone standard, like those in South Carolina, to attain the 8-hour ozone standard by December 31, 2007, and obtain cleaner air sooner than federally mandated. This option offers a more expeditious time line for achieving emissions reductions than expected under the EPA's 8-hour ozone implementation rulemaking, while providing "fail-safe" provisions for the area to revert to the traditional State Implementation Plan (SIP) process if specific milestones are not met. Through the development of this Early Action Compact (EAC), local, state, and EPA officials agree to work together to develop and implement local and state early action plans. The plans will become a part of the state early action SIP to reduce ground-level ozone concentrations to comply with the 8-hour ozone standard by December 31, 2007, and maintain the standard beyond that date. Failure to meet the obligations outlined in this EAC will result in immediate reversion to the traditional non-attainment designation process as required in the Clean Air Act (CAA).

In an effort to provide this information to areas within South Carolina, the South Carolina Department of Health and Environmental Control (DHEC) held six public meetings throughout the state. The locations of the meetings were targeted to areas that could potentially be designated as non-attainment for the 8-hour ozone standard. The meetings were held in Columbia, Greenville, Florence, Rock Hill, Aiken and Charleston. EPA officials participated in five of the six meetings. The general public, local government representatives, industry representatives, and environmental interest groups attended the meetings. Prior to the meetings, DHEC issued a press release regarding the development of an early action SIP. Correspondence including a fact sheet was sent to all county administrators, Councils of Governments, Metropolitan Planning Organizations, public interest groups, industry representatives, other state agencies and others determined to be stakeholders in the process.

The Parties to this (EAC) are: Jasper County, South Carolina Department of Health and Environmental Control (DHEC) and EPA.

**I. General Provisions**

- A. The parties commit to develop, implement and maintain the early action SIP (which includes the local early action plans) providing EPA defers the effective date of the non-attainment designation and related requirements as long as all conditions of the EAC and key milestones are met.
- B. If the potential area of non-attainment does not meet all the terms of the EAC, then it will forfeit its participation and will be subject to the full planning requirements under applicable CAA

traditional SIP processes including requirements defined as part of the EPA's 8-hour ozone implementation rulemaking.

- C. If the area has had the effective date of a non-attainment designation deferred and the area does not reach attainment of the standard by December 31, 2007, then the non-attainment designation will be effective. If the EPA's implementation schedule also requires a traditional SIP from areas on or before December 31, 2007, then a traditional SIP revision demonstrating attainment by the new attainment date will be due for the non-attainment area no later than December 31, 2008.
- D. Before formal adoption into the early action SIP, this agreement may be modified or terminated by mutual consent of all parties, or any party may withdraw from the agreement by notifying other parties in writing. If a party's withdrawal from the agreement prevents remaining signatories from satisfying any of the terms and milestones of the original agreement, the agreement will be void, any deferred effective date of the non-attainment designation would be withdrawn and the area's non-attainment designation would become effective soon after. Upon termination or withdrawal from the EAC, the area will be subject to the full planning requirements under applicable CAA traditional processes including requirements defined as part of the EPA's 8-hour ozone implementation rulemaking. The local government signatories will approve the local early action plans before submittal to DHEC for inclusion in the early action SIP. Once the local early action plan is incorporated into the early action SIP, any modifications will be treated as SIP revisions.
- E. Execution of this EAC by each Party shall be by signature of each Party's authorized representative. This agreement remains in effect until December 31, 2007.

## II. **Early Action Compact Requirements**

- A. **Milestones and Reporting**  
DHEC and local areas will assess progress towards developing and implementing the early action SIP and make a report available to EPA and the public every six months beginning in June 2003. As per EPA guidance, the key milestones for participation in the EAC are identified in the following table.

<b>Local Plan /Early Action SIP Milestones</b>		
<b>DATE</b>	<b>MILESTONE</b>	<b>RESPONSIBILITY</b>
<b>December 31, 2002</b>	EAC signed by all parties and submitted to EPA	Local/State/EPA
<b>June 16, 2003</b>	Discussion of control measures being considered to EPA	Local/State
<b>March 31, 2004</b>	Final local early action plan submitted to DHEC; copy to EPA	Local
<b>December 31, 2004</b>	Early Action State Implementation Plan submitted to EPA for incorporation into SIP	State
<b>April 1, 2005</b>	Local/State control strategies implemented no later than this date	Local/State
<b>September 30, 2005</b>	EPA takes final action on SIP submitted December 31, 2004	EPA
<b>June 30, 2006</b>	State submits progress report to EPA	State
<b>December 31, 2007</b>	Attainment of the 8-hour ozone standard	Local/State

**B. Emissions Inventories**

1. DHEC will be responsible for developing emissions inventories.
2. An initial modeling emissions inventory will be completed by December 31, 2002. This inventory includes:
  - a. Emissions modeling data for a 1998 episode that is representative of a typical ozone season exceedance that meets the EPA episode selection guidance;
  - b. MOBILE6 for determining on-road mobile emissions;
  - c. NONROAD model data; and,
  - d. Area source database utilizing population data allocated statewide.
3. A 2007 future year modeling emissions inventory will be developed by March 31, 2004. This inventory will sufficiently account for projected future growth in ozone precursor emissions through 2007, particularly from stationary, non-road and on-road mobile sources.
4. Additional inventories will be contingent upon legislative appropriations or other funding. Selection of specific episode inventories will be partially determined by the conceptual model, which reflects an analysis of meteorological conditions typical of high ozone events.
5. Emissions inventories will be compared and analyzed for trends in emission sources over time. The emissions inventory comparison and analysis will be completed by December 31, 2003.

C. Modeling

1. DHEC will be responsible for conducting the meteorological and air quality modeling analysis. DHEC will conduct the modeling analysis based on the "Draft Guidance on the use of Models and Other Analyses in Attainment Demonstrations for the 8-Hour Ozone NAAQS" (EPA-454/R-99-004, May 1999). The modeling will follow the guidance as facilitated by the EPA Regional Office.
2. Base case modeling will be completed by December 31, 2002. Future case modeling will be completed by October 31, 2003. One or more modeled control cases will be completed by January 31, 2004, with final revisions completed by March 31, 2004. All modeling will:
  - be SIP quality and perform within EPA's accepted margin of accuracy;
  - be carefully documented;
  - sufficiently account for projected future growth in ozone precursor emissions;
  - be accomplished by DHEC and reviewed by EPA; and,
  - be used to determine the effectiveness of NO<sub>x</sub> and/or VOC reductions. The control case(s) will be used to determine the relative effectiveness of different emission reduction strategies and to aid in the selection of appropriate emission reduction strategies.

D. Control Strategies

1. All adopted Federal and State control strategies that have been or will be implemented by the December 31, 2007, attainment date will be included in base, future and control case modeling.
2. Additional local and state control strategies under consideration will be identified by June 16, 2003. The local and state control strategies selected will be implemented as soon as practical, but no later than April 1, 2005.
3. Local and state control strategies will be specific, quantified, permanent and enforceable. The strategies will also include specific implementation dates and detailed documentation and reporting processes.
4. Voluntary strategies can play a supporting role in the local early action plan and the early action SIP. If emission reductions from voluntary strategies are quantified and credit is taken for them in the local early action plan or the early action SIP, those emission reductions will be enforceable. Additional strategies must be implemented to meet those quantified reduction requirements if quantified voluntary strategies fail. This is true for all quantified emission reductions.
5. Local and state control strategies will be designed and implemented with full stakeholder participation.

6. Local and state control strategies will be incorporated by DHEC into the early action SIP. In the event that the local area desires to add, delete or substitute strategies after early action SIP submittal, the local area will request a modification. Local early action plan modifications will be treated as SIP revisions and facilitated by DHEC.

E. Maintenance for Growth

1. The early action SIP will include a component to address emissions growth at least five years beyond December 31, 2007, ensuring that the areas will remain in attainment of the 8-hour ozone standard during that period. Attainment maintenance analysis will be completed by January 31, 2004, with final revisions completed by March 31, 2004. The analysis will employ one or more of the following or any other appropriate techniques necessary to make such a demonstration:
  - a. Modeling analysis showing ozone levels below the 8-hour ozone standard in 2012;
  - b. An annual review of growth (especially mobile and stationary source) to ensure control measures and growth assumptions are adequate;
  - c. Identification and quantification of federal, state, and/or local measures indicating sufficient reductions to offset growth estimates; or,
  - d. Any other appropriate techniques necessary to make such a determination.
2. The early action SIP must also detail a continuing planning process that includes modeling updates and modeling assumption verification (particularly growth assumptions). Modeling updates and planning processes must consider and evaluate the following:
  - a. All relevant actual new point sources;
  - b. Impacts from potential new source growth; and,
  - c. Future transportation patterns and their impact on air quality in a manner that is consistent with the most current adopted Long Range Transportation Plan and most current trend and projections of local motor vehicle emissions.
3. If the review of emissions growth in conjunction with the continuing planning process demonstrates that adopted emission reduction strategies are inadequate to address growth in emissions, additional measures will be added to the early action plan. Local planning processes should prepare for this possibility.
4. In the event that the continuing planning process identifies the need to add, delete, or substitute control strategies after the local early action plan has been incorporated into the early action SIP, the local area will initiate, and DHEC will facilitate a SIP revision to accommodate changes.

**F. Public Involvement**

1. Public involvement has been and will continue to be strongly encouraged during the planning and implementation process.
2. Public awareness programs will be used to provide opportunities for involvement in the planning process, implementation of control strategies, and any other issues important to the area.
3. Interested stakeholders (i.e., local, state, and federal government, citizens, public interest groups, and the business community) will continue to be involved in the planning process as early as possible. Planning meetings will be open to the public, with posted meeting times and locations. Early action SIP drafts will be publicly available, and the drafting process will have sufficient opportunities for comment from all interested stakeholders.
4. Opportunities for public comment on the proposed early action SIP will be provided and will follow the traditional SIP revision process as implemented by DHEC.
5. Semi-annual reports detailing, at a minimum, progress toward key milestones, will be made available to the public.
6. DHEC has established and will maintain a website for South Carolina's Early Action Plan for the 8-hour ozone standard, located at [www.scdhec.net/baq/eap.html](http://www.scdhec.net/baq/eap.html).

**III. Local Government Responsibilities**

The local governments agree to develop and implement a local early action plan that will promote the area's attainment by December 31, 2007, of the 8-hour ozone standard and maintenance until at least 2012. The local governments will develop this plan in coordination with the DHEC, EPA, stakeholders and the public. The local early action plan will include a process to evaluate the effectiveness and maintain long-term compliance with the standard.

After all adopted Federal and State controls that have been or will be implemented by the attainment date of December 31, 2007, are accounted for in the modeling, the local area must adopt additional local controls, as necessary to demonstrate attainment of the 8-hour ozone standard by December 31, 2007. Local controls under consideration must be identified and described by June 16, 2003. These measures must be included in the semi-annual report made available to the public.

The draft local early action plan will be submitted to DHEC by August 31, 2003. The final local early action plan will be submitted to DHEC, with a copy forwarded to EPA, by March 31, 2004. The adopted local early action plan will be included in the early action SIP due December 31, 2004.

In the event a development or issue arises that may impact performance or progress toward key milestones (including if a key milestone will be or has been missed and/or if a termination or modification has been requested), the responsible party will notify all other signatories in writing as soon as possible.

#### **IV. The South Carolina Department of Health and Environmental Control**

DHEC agrees to develop and implement a state early action SIP that will demonstrate the participating area's attainment by December 31, 2007, of the 8-hour ozone standard and maintenance until at least 2012. DHEC will develop this plan in coordination with the local governments, EPA, stakeholders and the public. The state early action SIP will include a process to monitor and maintain long-term compliance with the standard.

It is the responsibility of each state under the CAA to ensure attainment with all National Ambient Air Quality Standards. At any such time that an area is deemed non-attainment, the state will be required to develop a plan to return the area(s) to attainment in accordance with the CAA. If applicable, South Carolina is committed to working with adjacent states to assure mutual attainment of national standards.

In the event a development or issue arises that may impact performance or progress toward key milestones (including if a key milestone will be or has been missed and/or if a termination or modification has been requested), DHEC will notify all other signatories in writing as soon as possible.

DHEC will provide support to areas throughout the planning and implementation process by:

1. Developing emission inventories, modeling, trend analysis, and quantification and comparison of control measures.
2. Providing necessary information on all federal and state adopted emission reduction measures, which affect the area.
3. Providing technical and strategic assistance, as appropriate, in the selection and implementation of control strategies.
4. Providing technical and planning assistance in developing and implementing processes to address the impact of emissions growth beyond the attainment date.
5. Maintaining monitors and reporting and analysis of monitoring data.
6. Promoting public awareness efforts.
7. Coordinating communication between local areas and the EPA to facilitate continuing the EPA review of local work.
8. Ensuring expeditious review of local early action plan(s), and if deemed adequate, proposing modification of the early action SIP to adopt the early action plan.

9. Adopting control measures into the early action SIP as expeditiously as possible. The final complete early action SIP revision must be completed, adopted, and submitted by the state to the EPA by December 31, 2004.
10. Tracking progress. If any milestone is missed and EPA withdraws the deferred effective date, thereby triggering a non-attainment designation and applicable statutory requirements, the state will strive to submit a traditional non-attainment SIP within one year. However, due to the South Carolina legislative review process, it may take at least eighteen months.
11. Working concurrently with areas not electing to participate in the early action SIP process in preparing the traditional SIP submittal as required by the CAA.

## **V. The Environmental Protection Agency**

The EPA will participate by:

1. Recognizing the local area's and state's commitment to voluntarily adopt an early, substantive, enforceable, and scientifically-based attainment plan with early implementation of control measures by becoming a party to the EAC developed in conformance with South Carolina's Protocol for Early Action Compacts.
2. Providing technical assistance to the state(s) and local area(s) in the development of the early action plan.
3. Reviewing and approving the completed early action SIP by no later than September 30, 2005.
4. Deferring the effective date of non-attainment designation and related requirements for participating areas that fail to meet the 8-hour ozone standard as long as all terms and key milestones of the EAC are being met, including submission of the early action SIP revision by December 31, 2004.
5. Designating the area expeditiously as attainment and imposing no additional requirements, provided that the monitors in the area reflect attainment by December 31, 2007.
6. Taking action to withdraw the deferred effective date if the area violates the standard as of December 31, 2007, and the area has had the effective date of its non-attainment designation deferred. The area's non-attainment designation will become effective soon after.
7. Ensuring appropriate credit in the traditional SIP process for all emissions reductions from measures implemented in the early action SIP if the area does not meet all the terms of the EAC; including meeting agreed-upon key milestones and is designated (or re-designated if necessary) according to the EPA's 8-hour ozone implementation guidelines. The EPA will offer such an area no delays, exemptions, or other favorable treatment because of its participation in the EAC.

8. Not allowing any area to renew their EAC after December 31, 2007, or initiate a new compact if it has previously forfeited its participation.

VI. Signatures

  
United States Environmental Protection Agency      Regional Administrator      12-30-02  
Title      Date

  
South Carolina      Deputy Commissioner      12/20/02  
Department of Health and Environmental Control      Title      Date

DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

  
\_\_\_\_\_  
JASPER COUNTY REPRESENTATIVE

County Administrator  
TITLE  
DATE  
12/16/02

ATTESTS:

  
\_\_\_\_\_  
JUDITH M. FRANK  
CLERK TO COUNCIL

RESOLUTION 02-11

RESOLUTION REGARDING THE S.C. 8 HOUR OZONE EARLY ACTION COMPACT

WHEREAS, THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY (EPA) HAS REQUESTED THAT JASPER COUNTY PARTICIPATE IN THE S.C. 8 HOUR OZONE EARLY ACTION COMPACT;

AND WHEREAS, THE STAFF OF JASPER COUNTY HAS REVIEWED AND RECOMMENDED IT'S APPROVAL;

NOW THEREFORE BE IT RESOLVED, THAT THE JASPER COUNTY COUNCIL APPROVES ENTERING INTO THE S.C. 8 HOUR OZONE EARLY ACTION COMPACT WITH THE STATE AND FEDERAL AGENCIES WHICH IS HERETO ATTACHED AND MADE A PART HEREOF AND THE COUNTY ADMINISTRATOR IS AUTHORIZED TO EXECUTE THIS AGREEMENT ON BEHALF OF THE COUNTY COUNCIL

ON THIS 16<sup>TH</sup> DAY OF DECEMBER, 2002

ATTESTS:

  
JUDITH M. FRANK  
CLERK TO COUNCIL

APPROVED:

  
THOMAS MCCLARY  
ADMINISTRATOR

## **Lower Savannah Area**

## **Local Early Action Compacts**

**December 2002**



**SOUTH CAROLINA'S 8-HOUR OZONE  
EARLY ACTION COMPACT  
Aiken County**

The United States Environmental Protection Agency (EPA) has provided an option for areas currently meeting the 1-hour ozone standard, like those in South Carolina, to attain the 8-hour ozone standard by December 31, 2007, and obtain cleaner air sooner than federally mandated. This option offers a more expeditious time line for achieving emissions reductions than expected under the EPA's 8-hour ozone implementation rulemaking, while providing "fail-safe" provisions for the area to revert to the traditional State Implementation Plan (SIP) process if specific milestones are not met. Through the development of this Early Action Compact (EAC), local, state, and EPA officials agree to work together to develop and implement local and state early action plans. The plans will become a part of the state early action SIP to reduce ground-level ozone concentrations to comply with the 8-hour ozone standard by December 31, 2007, and maintain the standard beyond that date. Failure to meet the obligations outlined in this EAC will result in immediate reversion to the traditional non-attainment designation process as required in the Clean Air Act (CAA).

In an effort to provide this information to areas within South Carolina, the South Carolina Department of Health and Environmental Control (DHEC) held six public meetings throughout the state. The locations of the meetings were targeted to areas that could potentially be designated as non-attainment for the 8-hour ozone standard. The meetings were held in Columbia, Greenville, Florence, Rock Hill, Aiken and Charleston. EPA officials participated in five of the six meetings. The general public, local government representatives, industry representatives, and environmental interest groups attended the meetings. Prior to the meetings, DHEC issued a press release regarding the development of an early action SIP. Correspondence including a fact sheet was sent to all county administrators, Councils of Governments, Metropolitan Planning Organizations, public interest groups, industry representatives, other state agencies and others determined to be stakeholders in the process.

The Parties to this (EAC) are: Aiken County, South Carolina Department of Health and Environmental Control (DHEC) and EPA.

**I. General Provisions**

- A. The parties commit to develop, implement and maintain the early action SIP (which includes the local early action plans) providing EPA defers the effective date of the non-attainment designation and related requirements as long as all conditions of the EAC and key milestones are met.
- B. If the potential area of non-attainment does not meet all the terms of the EAC, then it will forfeit its participation and will be subject to the full planning requirements under applicable CAA

traditional SIP processes including requirements defined as part of the EPA's 8-hour ozone implementation rulemaking.

- C. If the area has had the effective date of a non-attainment designation deferred and the area does not reach attainment of the standard by December 31, 2007, then the non-attainment designation will be effective. If the EPA's implementation schedule also requires a traditional SIP from areas on or before December 31, 2007, then a traditional SIP revision demonstrating attainment by the new attainment date will be due for the non-attainment area no later than December 31, 2008.
- D. Before formal adoption into the early action SIP, this agreement may be modified or terminated by mutual consent of all parties, or any party may withdraw from the agreement by notifying other parties in writing. If a party's withdrawal from the agreement prevents remaining signatories from satisfying any of the terms and milestones of the original agreement, the agreement will be void, any deferred effective date of the non-attainment designation would be withdrawn and the area's non-attainment designation would become effective soon after. Upon termination or withdrawal from the EAC, the area will be subject to the full planning requirements under applicable CAA traditional processes including requirements defined as part of the EPA's 8-hour ozone implementation rulemaking. The local government signatories will approve the local early action plans before submittal to DHEC for inclusion in the early action SIP. Once the local early action plan is incorporated into the early action SIP, any modifications will be treated as SIP revisions.
- E. Execution of this EAC by each Party shall be by signature of each Party's authorized representative. This agreement remains in effect until December 31, 2007.

## II. **Early Action Compact Requirements**

- A. **Milestones and Reporting**  
DHEC and local areas will assess progress towards developing and implementing the early action SIP and make a report available to EPA and the public every six months beginning in June 2003. As per EPA guidance, the key milestones for participation in the EAC are identified in the following table.

<b>Local Plan /Early Action SIP Milestones</b>		
<b>DATE</b>	<b>MILESTONE</b>	<b>RESPONSIBILITY</b>
<b>December 31, 2002</b>	EAC signed by all parties and submitted to EPA	Local/State/EPA
<b>June 16, 2003</b>	Discussion of control measures being considered to EPA	Local/State
<b>March 31, 2004</b>	Final local early action plan submitted to DHEC; copy to EPA	Local
<b>December 31, 2004</b>	Early Action State Implementation Plan submitted to EPA for incorporation into SIP	State
<b>April 1, 2005</b>	Local/State control strategies implemented no later than this date	Local/State
<b>September 30, 2005</b>	EPA takes final action on SIP submitted December 31, 2004	EPA
<b>June 30, 2006</b>	State submits progress report to EPA	State
<b>December 31, 2007</b>	Attainment of the 8-hour ozone standard	Local/State

B. Emissions Inventories

1. DHEC will be responsible for developing emissions inventories.
2. An initial modeling emissions inventory will be completed by December 31, 2002. This inventory includes:
  - a. Emissions modeling data for a 1998 episode that is representative of a typical ozone season exceedance that meets the EPA episode selection guidance;
  - b. MOBILE6 for determining on-road mobile emissions;
  - c. NONROAD model data; and,
  - d. Area source database utilizing population data allocated statewide.
3. A 2007 future year modeling emissions inventory will be developed by March 31, 2004. This inventory will sufficiently account for projected future growth in ozone precursor emissions through 2007, particularly from stationary, non-road and on-road mobile sources.
4. Additional inventories will be contingent upon legislative appropriations or other funding. Selection of specific episode inventories will be partially determined by the conceptual model, which reflects an analysis of meteorological conditions typical of high ozone events.
5. Emissions inventories will be compared and analyzed for trends in emission sources over time. The emissions inventory comparison and analysis will be completed by December 31, 2003.

C. Modeling

1. DHEC will be responsible for conducting the meteorological and air quality modeling analysis. DHEC will conduct the modeling analysis based on the "Draft Guidance on the use of Models and Other Analyses in Attainment Demonstrations for the 8-Hour Ozone NAAQS" (EPA-454/R-99-004, May 1999). The modeling will follow the guidance as facilitated by the EPA Regional Office.
2. Base case modeling will be completed by December 31, 2002. Future case modeling will be completed by October 31, 2003. One or more modeled control cases will be completed by January 31, 2004, with final revisions completed by March 31, 2004. All modeling will:
  - be SIP quality and perform within EPA's accepted margin of accuracy;
  - be carefully documented;
  - sufficiently account for projected future growth in ozone precursor emissions;
  - be accomplished by DHEC and reviewed by EPA; and,
  - be used to determine the effectiveness of NO<sub>x</sub> and/or VOC reductions. The control case(s) will be used to determine the relative effectiveness of different emission reduction strategies and to aid in the selection of appropriate emission reduction strategies.

D. Control Strategies

1. All adopted Federal and State control strategies that have been or will be implemented by the December 31, 2007, attainment date will be included in base, future and control case modeling.
2. Additional local and state control strategies under consideration will be identified by June 16, 2003. The local and state control strategies selected will be implemented as soon as practical, but no later than April 1, 2005.
3. Local and state control strategies will be specific, quantified, permanent and enforceable. The strategies will also include specific implementation dates and detailed documentation and reporting processes.
4. Voluntary strategies can play a supporting role in the local early action plan and the early action SIP. If emission reductions from voluntary strategies are quantified and credit is taken for them in the local early action plan or the early action SIP, those emission reductions will be enforceable. Additional strategies must be implemented to meet those quantified reduction requirements if quantified voluntary strategies fail. This is true for all quantified emission reductions.
5. Local and state control strategies will be designed and implemented with full stakeholder participation.

6. Local and state control strategies will be incorporated by DHEC into the early action SIP. In the event that the local area desires to add, delete or substitute strategies after early action SIP submittal, the local area will request a modification. Local early action plan modifications will be treated as SIP revisions and facilitated by DHEC.

E. Maintenance for Growth

1. The early action SIP will include a component to address emissions growth at least five years beyond December 31, 2007, ensuring that the areas will remain in attainment of the 8-hour ozone standard during that period. Attainment maintenance analysis will be completed by January 31, 2004, with final revisions completed by March 31, 2004. The analysis will employ one or more of the following or any other appropriate techniques necessary to make such a demonstration:
  - a. Modeling analysis showing ozone levels below the 8-hour ozone standard in 2012;
  - b. An annual review of growth (especially mobile and stationary source) to ensure control measures and growth assumptions are adequate;
  - c. Identification and quantification of federal, state, and/or local measures indicating sufficient reductions to offset growth estimates; or,
  - d. Any other appropriate techniques necessary to make such a determination.
2. The early action SIP must also detail a continuing planning process that includes modeling updates and modeling assumption verification (particularly growth assumptions). Modeling updates and planning processes must consider and evaluate the following:
  - a. All relevant actual new point sources;
  - b. Impacts from potential new source growth; and,
  - c. Future transportation patterns and their impact on air quality in a manner that is consistent with the most current adopted Long Range Transportation Plan and most current trend and projections of local motor vehicle emissions.
3. If the review of emissions growth in conjunction with the continuing planning process demonstrates that adopted emission reduction strategies are inadequate to address growth in emissions, additional measures will be added to the early action plan. Local planning processes should prepare for this possibility.
4. In the event that the continuing planning process identifies the need to add, delete, or substitute control strategies after the local early action plan has been incorporated into the early action SIP, the local area will initiate, and DHEC will facilitate a SIP revision to accommodate changes.

**F. Public Involvement**

1. Public involvement has been and will continue to be strongly encouraged during the planning and implementation process.
2. Public awareness programs will be used to provide opportunities for involvement in the planning process, implementation of control strategies, and any other issues important to the area.
3. Interested stakeholders (i.e., local, state, and federal government, citizens, public interest groups, and the business community) will continue to be involved in the planning process as early as possible. Planning meetings will be open to the public, with posted meeting times and locations. Early action SIP drafts will be publicly available, and the drafting process will have sufficient opportunities for comment from all interested stakeholders.
4. Opportunities for public comment on the proposed early action SIP will be provided and will follow the traditional SIP revision process as implemented by DHEC.
5. Semi-annual reports detailing, at a minimum, progress toward key milestones, will be made available to the public.
6. DHEC has established and will maintain a website for South Carolina's Early Action Plan for the 8-hour ozone standard, located at [www.scdhec.net/baq/eap.html](http://www.scdhec.net/baq/eap.html).

**III. Local Government Responsibilities**

The local governments agree to develop and implement a local early action plan that will promote the area's attainment by December 31, 2007, of the 8-hour ozone standard and maintenance until at least 2012. The local governments will develop this plan in coordination with the DHEC, EPA, stakeholders and the public. The local early action plan will include a process to evaluate the effectiveness and maintain long-term compliance with the standard.

After all adopted Federal and State controls that have been or will be implemented by the attainment date of December 31, 2007, are accounted for in the modeling, the local area must adopt additional local controls, as necessary to demonstrate attainment of the 8-hour ozone standard by December 31, 2007. Local controls under consideration must be identified and described by June 16, 2003. These measures must be included in the semi-annual report made available to the public.

The draft local early action plan will be submitted to DHEC by August 31, 2003. The final local early action plan will be submitted to DHEC, with a copy forwarded to EPA, by March 31, 2004. The adopted local early action plan will be included in the early action SIP due December 31, 2004.

In the event a development or issue arises that may impact performance or progress toward key milestones (including if a key milestone will be or has been missed and/or if a termination or modification has been requested), the responsible party will notify all other signatories in writing as soon as possible.

#### **IV. The South Carolina Department of Health and Environmental Control**

DHEC agrees to develop and implement a state early action SIP that will demonstrate the participating area's attainment by December 31, 2007, of the 8-hour ozone standard and maintenance until at least 2012. DHEC will develop this plan in coordination with the local governments, EPA, stakeholders and the public. The state early action SIP will include a process to monitor and maintain long-term compliance with the standard.

It is the responsibility of each state under the CAA to ensure attainment with all National Ambient Air Quality Standards. At any such time that an area is deemed non-attainment, the state will be required to develop a plan to return the area(s) to attainment in accordance with the CAA. If applicable, South Carolina is committed to working with adjacent states to assure mutual attainment of national standards.

In the event a development or issue arises that may impact performance or progress toward key milestones (including if a key milestone will be or has been missed and/or if a termination or modification has been requested), DHEC will notify all other signatories in writing as soon as possible.

DHEC will provide support to areas throughout the planning and implementation process by:

1. Developing emission inventories, modeling, trend analysis, and quantification and comparison of control measures.
2. Providing necessary information on all federal and state adopted emission reduction measures, which affect the area.
3. Providing technical and strategic assistance, as appropriate, in the selection and implementation of control strategies.
4. Providing technical and planning assistance in developing and implementing processes to address the impact of emissions growth beyond the attainment date.
5. Maintaining monitors and reporting and analysis of monitoring data.
6. Promoting public awareness efforts.
7. Coordinating communication between local areas and the EPA to facilitate continuing the EPA review of local work.
8. Ensuring expeditious review of local early action plan(s), and if deemed adequate, proposing modification of the early action SIP to adopt the early action plan.

9. Adopting control measures into the early action SIP as expeditiously as possible. The final complete early action SIP revision must be completed, adopted, and submitted by the state to the EPA by December 31, 2004.
10. Tracking progress. If any milestone is missed and EPA withdraws the deferred effective date, thereby triggering a non-attainment designation and applicable statutory requirements, the state will strive to submit a traditional non-attainment SIP within one year. However, due to the South Carolina legislative review process, it may take at least eighteen months.
11. Working concurrently with areas not electing to participate in the early action SIP process in preparing the traditional SIP submittal as required by the CAA.

## **V. The Environmental Protection Agency**

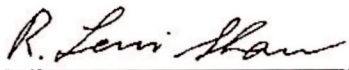
The EPA will participate by:

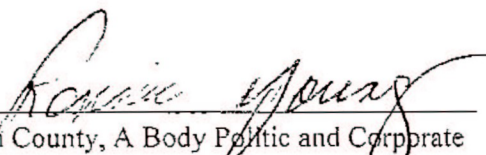
1. Recognizing the local area's and state's commitment to voluntarily adopt an early, substantive, enforceable, and scientifically-based attainment plan with early implementation of control measures by becoming a party to the EAC developed in conformance with South Carolina's Protocol for Early Action Compacts.
2. Providing technical assistance to the state(s) and local area(s) in the development of the early action plan.
3. Reviewing and approving the completed early action SIP by no later than September 30, 2005.
4. Deferring the effective date of non-attainment designation and related requirements for participating areas that fail to meet the 8-hour ozone standard as long as all terms and key milestones of the EAC are being met, including submission of the early action SIP revision by December 31, 2004.
5. Designating the area expeditiously as attainment and imposing no additional requirements, provided that the monitors in the area reflect attainment by December 31, 2007.
6. Taking action to withdraw the deferred effective date if the area violates the standard as of December 31, 2007, and the area has had the effective date of its non-attainment designation deferred. The area's non-attainment designation will become effective soon after.
7. Ensuring appropriate credit in the traditional SIP process for all emissions reductions from measures implemented in the early action SIP if the area does not meet all the terms of the EAC; including meeting agreed-upon key milestones and is designated (or re-designated if necessary) according to the EPA's 8-hour ozone implementation guidelines. The EPA will offer such an area no delays, exemptions, or other favorable treatment because of its participation in the EAC.

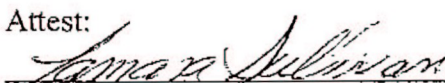
8. Not allowing any area to renew their EAC after December 31, 2007, or initiate a new compact if it has previously forfeited its participation.

VI. Signatures

 Regional Administrator 12-30-02  
United States Environmental Protection Agency Title Date

 Deputy Commissioner 12/20/02  
South Carolina Title Date  
Department of Health and Environmental Control

 Chairman 12/17/02  
Aiken County, A Body Politic and Corporate Title Date  
And a Political Subdivision of the State  
Of South Carolina

Attest:  
  
Council Clerk

APPROVED  
AS TO FORM AND CONTENT  
BELL, SUHASKY & BROWN, P.A.  
Aiken County  
BY  12/21/12

**SOUTH CAROLINA'S 8-HOUR OZONE  
EARLY ACTION COMPACT  
Allendale County**

The United States Environmental Protection Agency (EPA) has provided an option for areas currently meeting the 1-hour ozone standard, like those in South Carolina, to attain the 8-hour ozone standard by December 31, 2007, and obtain cleaner air sooner than federally mandated. This option offers a more expeditious time line for achieving emissions reductions than expected under the EPA's 8-hour ozone implementation rulemaking, while providing "fail-safe" provisions for the area to revert to the traditional State Implementation Plan (SIP) process if specific milestones are not met. Through the development of this Early Action Compact (EAC), local, state, and EPA officials agree to work together to develop and implement local and state early action plans. The plans will become a part of the state early action SIP to reduce ground-level ozone concentrations to comply with the 8-hour ozone standard by December 31, 2007, and maintain the standard beyond that date. Failure to meet the obligations outlined in this EAC will result in immediate reversion to the traditional non-attainment designation process as required in the Clean Air Act (CAA).

In an effort to provide this information to areas within South Carolina, the South Carolina Department of Health and Environmental Control (DHEC) held six public meetings throughout the state. The locations of the meetings were targeted to areas that could potentially be designated as non-attainment for the 8-hour ozone standard. The meetings were held in Columbia, Greenville, Florence, Rock Hill, Aiken and Charleston. EPA officials participated in five of the six meetings. The general public, local government representatives, industry representatives, and environmental interest groups attended the meetings. Prior to the meetings, DHEC issued a press release regarding the development of an early action SIP. Correspondence including a fact sheet was sent to all county administrators, Councils of Governments, Metropolitan Planning Organizations, public interest groups, industry representatives, other state agencies and others determined to be stakeholders in the process.

The Parties to this (EAC) are: Allendale County, South Carolina Department of Health and Environmental Control (DHEC) and EPA.

**I. General Provisions**

- A. The parties commit to develop, implement and maintain the early action SIP (which includes the local early action plans) providing EPA defers the effective date of the non-attainment designation and related requirements as long as all conditions of the EAC and key milestones are met.
- B. If the potential area of non-attainment does not meet all the terms of the EAC, then it will forfeit its participation and will be subject to the full planning requirements under applicable CAA

traditional SIP processes including requirements defined as part of the EPA's 8-hour ozone implementation rulemaking.

- C. If the area has had the effective date of a non-attainment designation deferred and the area does not reach attainment of the standard by December 31, 2007, then the non-attainment designation will be effective. If the EPA's implementation schedule also requires a traditional SIP from areas on or before December 31, 2007, then a traditional SIP revision demonstrating attainment by the new attainment date will be due for the non-attainment area no later than December 31, 2008.
- D. Before formal adoption into the early action SIP, this agreement may be modified or terminated by mutual consent of all parties, or any party may withdraw from the agreement by notifying other parties in writing. If a party's withdrawal from the agreement prevents remaining signatories from satisfying any of the terms and milestones of the original agreement, the agreement will be void, any deferred effective date of the non-attainment designation would be withdrawn and the area's non-attainment designation would become effective soon after. Upon termination or withdrawal from the EAC, the area will be subject to the full planning requirements under applicable CAA traditional processes including requirements defined as part of the EPA's 8-hour ozone implementation rulemaking. The local government signatories will approve the local early action plans before submittal to DHEC for inclusion in the early action SIP. Once the local early action plan is incorporated into the early action SIP, any modifications will be treated as SIP revisions.
- E. Execution of this EAC by each Party shall be by signature of each Party's authorized representative. This agreement remains in effect until December 31, 2007.

## II. **Early Action Compact Requirements**

- A. **Milestones and Reporting**  
DHEC and local areas will assess progress towards developing and implementing the early action SIP and make a report available to EPA and the public every six months beginning in June 2003. As per EPA guidance, the key milestones for participation in the EAC are identified in the following table.

<b>Local Plan /Early Action SIP Milestones</b>		
<b>DATE</b>	<b>MILESTONE</b>	<b>RESPONSIBILITY</b>
<b>December 31, 2002</b>	EAC signed by all parties and submitted to EPA	Local/State/EPA
<b>June 16, 2003</b>	Discussion of control measures being considered to EPA	Local/State
<b>March 31, 2004</b>	Final local early action plan submitted to DHEC; copy to EPA	Local
<b>December 31, 2004</b>	Early Action State Implementation Plan submitted to EPA for incorporation into SIP	State
<b>April 1, 2005</b>	Local/State control strategies implemented no later than this date	Local/State
<b>September 30, 2005</b>	EPA takes final action on SIP submitted December 31, 2004	EPA
<b>June 30, 2006</b>	State submits progress report to EPA	State
<b>December 31, 2007</b>	Attainment of the 8-hour ozone standard	Local/State

B. Emissions Inventories

1. DHEC will be responsible for developing emissions inventories.
2. An initial modeling emissions inventory will be completed by December 31, 2002. This inventory includes:
  - a. Emissions modeling data for a 1998 episode that is representative of a typical ozone season exceedance that meets the EPA episode selection guidance;
  - b. MOBILE6 for determining on-road mobile emissions;
  - c. NONROAD model data; and,
  - d. Area source database utilizing population data allocated statewide.
3. A 2007 future year modeling emissions inventory will be developed by March 31, 2004. This inventory will sufficiently account for projected future growth in ozone precursor emissions through 2007, particularly from stationary, non-road and on-road mobile sources.
4. Additional inventories will be contingent upon legislative appropriations or other funding. Selection of specific episode inventories will be partially determined by the conceptual model, which reflects an analysis of meteorological conditions typical of high ozone events.
5. Emissions inventories will be compared and analyzed for trends in emission sources over time. The emissions inventory comparison and analysis will be completed by December 31, 2003.

C. Modeling

1. DHEC will be responsible for conducting the meteorological and air quality modeling analysis. DHEC will conduct the modeling analysis based on the "Draft Guidance on the use of Models and Other Analyses in Attainment Demonstrations for the 8-Hour Ozone NAAQS" (EPA-454/R-99-004, May 1999). The modeling will follow the guidance as facilitated by the EPA Regional Office.
2. Base case modeling will be completed by December 31, 2002. Future case modeling will be completed by October 31, 2003. One or more modeled control cases will be completed by January 31, 2004, with final revisions completed by March 31, 2004. All modeling will:
  - be SIP quality and perform within EPA's accepted margin of accuracy;
  - be carefully documented;
  - sufficiently account for projected future growth in ozone precursor emissions;
  - be accomplished by DHEC and reviewed by EPA; and,
  - be used to determine the effectiveness of NO<sub>x</sub> and/or VOC reductions. The control case(s) will be used to determine the relative effectiveness of different emission reduction strategies and to aid in the selection of appropriate emission reduction strategies.

D. Control Strategies

1. All adopted Federal and State control strategies that have been or will be implemented by the December 31, 2007, attainment date will be included in base, future and control case modeling.
2. Additional local and state control strategies under consideration will be identified by June 16, 2003. The local and state control strategies selected will be implemented as soon as practical, but no later than April 1, 2005.
3. Local and state control strategies will be specific, quantified, permanent and enforceable. The strategies will also include specific implementation dates and detailed documentation and reporting processes.
4. Voluntary strategies can play a supporting role in the local early action plan and the early action SIP. If emission reductions from voluntary strategies are quantified and credit is taken for them in the local early action plan or the early action SIP, those emission reductions will be enforceable. Additional strategies must be implemented to meet those quantified reduction requirements if quantified voluntary strategies fail. This is true for all quantified emission reductions.
5. Local and state control strategies will be designed and implemented with full stakeholder participation.

6. Local and state control strategies will be incorporated by DHEC into the early action SIP. In the event that the local area desires to add, delete or substitute strategies after early action SIP submittal, the local area will request a modification. Local early action plan modifications will be treated as SIP revisions and facilitated by DHEC.

E. Maintenance for Growth

1. The early action SIP will include a component to address emissions growth at least five years beyond December 31, 2007, ensuring that the areas will remain in attainment of the 8-hour ozone standard during that period. Attainment maintenance analysis will be completed by January 31, 2004, with final revisions completed by March 31, 2004. The analysis will employ one or more of the following or any other appropriate techniques necessary to make such a demonstration:
  - a. Modeling analysis showing ozone levels below the 8-hour ozone standard in 2012;
  - b. An annual review of growth (especially mobile and stationary source) to ensure control measures and growth assumptions are adequate;
  - c. Identification and quantification of federal, state, and/or local measures indicating sufficient reductions to offset growth estimates; or,
  - d. Any other appropriate techniques necessary to make such a determination.
2. The early action SIP must also detail a continuing planning process that includes modeling updates and modeling assumption verification (particularly growth assumptions). Modeling updates and planning processes must consider and evaluate the following:
  - a. All relevant actual new point sources;
  - b. Impacts from potential new source growth; and,
  - c. Future transportation patterns and their impact on air quality in a manner that is consistent with the most current adopted Long Range Transportation Plan and most current trend and projections of local motor vehicle emissions.
3. If the review of emissions growth in conjunction with the continuing planning process demonstrates that adopted emission reduction strategies are inadequate to address growth in emissions, additional measures will be added to the early action plan. Local planning processes should prepare for this possibility.
4. In the event that the continuing planning process identifies the need to add, delete, or substitute control strategies after the local early action plan has been incorporated into the early action SIP, the local area will initiate, and DHEC will facilitate a SIP revision to accommodate changes.

**F. Public Involvement**

1. Public involvement has been and will continue to be strongly encouraged during the planning and implementation process.
2. Public awareness programs will be used to provide opportunities for involvement in the planning process, implementation of control strategies, and any other issues important to the area.
3. Interested stakeholders (i.e., local, state, and federal government, citizens, public interest groups, and the business community) will continue to be involved in the planning process as early as possible. Planning meetings will be open to the public, with posted meeting times and locations. Early action SIP drafts will be publicly available, and the drafting process will have sufficient opportunities for comment from all interested stakeholders.
4. Opportunities for public comment on the proposed early action SIP will be provided and will follow the traditional SIP revision process as implemented by DHEC.
5. Semi-annual reports detailing, at a minimum, progress toward key milestones, will be made available to the public.
6. DHEC has established and will maintain a website for South Carolina's Early Action Plan for the 8-hour ozone standard, located at [www.scdhec.net/baq/eap.html](http://www.scdhec.net/baq/eap.html).

**III. Local Government Responsibilities**

The local governments agree to develop and implement a local early action plan that will promote the area's attainment by December 31, 2007, of the 8-hour ozone standard and maintenance until at least 2012. The local governments will develop this plan in coordination with the DHEC, EPA, stakeholders and the public. The local early action plan will include a process to evaluate the effectiveness and maintain long-term compliance with the standard.

After all adopted Federal and State controls that have been or will be implemented by the attainment date of December 31, 2007, are accounted for in the modeling, the local area must adopt additional local controls, as necessary to demonstrate attainment of the 8-hour ozone standard by December 31, 2007. Local controls under consideration must be identified and described by June 16, 2003. These measures must be included in the semi-annual report made available to the public.

The draft local early action plan will be submitted to DHEC by August 31, 2003. The final local early action plan will be submitted to DHEC, with a copy forwarded to EPA, by March 31, 2004. The adopted local early action plan will be included in the early action SIP due December 31, 2004.

In the event a development or issue arises that may impact performance or progress toward key milestones (including if a key milestone will be or has been missed and/or if a termination or modification has been requested), the responsible party will notify all other signatories in writing as soon as possible.

#### **IV. The South Carolina Department of Health and Environmental Control**

DHEC agrees to develop and implement a state early action SIP that will demonstrate the participating area's attainment by December 31, 2007, of the 8-hour ozone standard and maintenance until at least 2012. DHEC will develop this plan in coordination with the local governments, EPA, stakeholders and the public. The state early action SIP will include a process to monitor and maintain long-term compliance with the standard.

It is the responsibility of each state under the CAA to ensure attainment with all National Ambient Air Quality Standards. At any such time that an area is deemed non-attainment, the state will be required to develop a plan to return the area(s) to attainment in accordance with the CAA. If applicable, South Carolina is committed to working with adjacent states to assure mutual attainment of national standards.

In the event a development or issue arises that may impact performance or progress toward key milestones (including if a key milestone will be or has been missed and/or if a termination or modification has been requested), DHEC will notify all other signatories in writing as soon as possible.

DHEC will provide support to areas throughout the planning and implementation process by:

1. Developing emission inventories, modeling, trend analysis, and quantification and comparison of control measures.
2. Providing necessary information on all federal and state adopted emission reduction measures, which affect the area.
3. Providing technical and strategic assistance, as appropriate, in the selection and implementation of control strategies.
4. Providing technical and planning assistance in developing and implementing processes to address the impact of emissions growth beyond the attainment date.
5. Maintaining monitors and reporting and analysis of monitoring data.
6. Promoting public awareness efforts.
7. Coordinating communication between local areas and the EPA to facilitate continuing the EPA review of local work.
8. Ensuring expeditious review of local early action plan(s), and if deemed adequate, proposing modification of the early action SIP to adopt the early action plan.

9. Adopting control measures into the early action SIP as expeditiously as possible. The final complete early action SIP revision must be completed, adopted, and submitted by the state to the EPA by December 31, 2004.
10. Tracking progress. If any milestone is missed and EPA withdraws the deferred effective date, thereby triggering a non-attainment designation and applicable statutory requirements, the state will strive to submit a traditional non-attainment SIP within one year. However, due to the South Carolina legislative review process, it may take at least eighteen months.
11. Working concurrently with areas not electing to participate in the early action SIP process in preparing the traditional SIP submittal as required by the CAA.

## **V. The Environmental Protection Agency**

The EPA will participate by:

1. Recognizing the local area's and state's commitment to voluntarily adopt an early, substantive, enforceable, and scientifically-based attainment plan with early implementation of control measures by becoming a party to the EAC developed in conformance with South Carolina's Protocol for Early Action Compacts.
2. Providing technical assistance to the state(s) and local area(s) in the development of the early action plan.
3. Reviewing and approving the completed early action SIP by no later than September 30, 2005.
4. Deferring the effective date of non-attainment designation and related requirements for participating areas that fail to meet the 8-hour ozone standard as long as all terms and key milestones of the EAC are being met, including submission of the early action SIP revision by December 31, 2004.
5. Designating the area expeditiously as attainment and imposing no additional requirements, provided that the monitors in the area reflect attainment by December 31, 2007.
6. Taking action to withdraw the deferred effective date if the area violates the standard as of December 31, 2007, and the area has had the effective date of its non-attainment designation deferred. The area's non-attainment designation will become effective soon after.
7. Ensuring appropriate credit in the traditional SIP process for all emissions reductions from measures implemented in the early action SIP if the area does not meet all the terms of the EAC; including meeting agreed-upon key milestones and is designated (or re-designated if necessary) according to the EPA's 8-hour ozone implementation guidelines. The EPA will offer such an area no delays, exemptions, or other favorable treatment because of its participation in the EAC.

8. Not allowing any area to renew their EAC after December 31, 2007, or initiate a new compact if it has previously forfeited its participation.

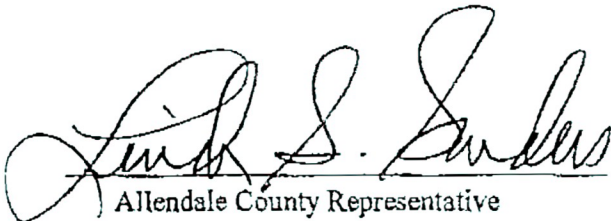
VL Signatures

  
United States Environmental Protection Agency

Regional Administrator DEC 31 2002  
Title Date

R. Lewis Shaw  
South Carolina  
Department of Health and Environmental Control

Deputy Commissioner 12/30/02  
Title Date

  
Allendale County Representative

EPA Director 12/30/02  
Title Date

**SOUTH CAROLINA'S 8-HOUR OZONE  
EARLY ACTION COMPACT  
Bamberg County**

The United States Environmental Protection Agency (EPA) has provided an option for areas currently meeting the 1-hour ozone standard, like those in South Carolina, to attain the 8-hour ozone standard by December 31, 2007, and obtain cleaner air sooner than federally mandated. This option offers a more expeditious time line for achieving emissions reductions than expected under the EPA's 8-hour ozone implementation rulemaking, while providing "fail-safe" provisions for the area to revert to the traditional State Implementation Plan (SIP) process if specific milestones are not met. Through the development of this Early Action Compact (EAC), local, state, and EPA officials agree to work together to develop and implement local and state early action plans. The plans will become a part of the state early action SIP to reduce ground-level ozone concentrations to comply with the 8-hour ozone standard by December 31, 2007, and maintain the standard beyond that date. Failure to meet the obligations outlined in this EAC will result in immediate reversion to the traditional non-attainment designation process as required in the Clean Air Act (CAA).

In an effort to provide this information to areas within South Carolina, the South Carolina Department of Health and Environmental Control (DHEC) held six public meetings throughout the state. The locations of the meetings were targeted to areas that could potentially be designated as non-attainment for the 8-hour ozone standard. The meetings were held in Columbia, Greenville, Florence, Rock Hill, Aiken and Charleston. EPA officials participated in five of the six meetings. The general public, local government representatives, industry representatives, and environmental interest groups attended the meetings. Prior to the meetings, DHEC issued a press release regarding the development of an early action SIP. Correspondence including a fact sheet was sent to all county administrators, Councils of Governments, Metropolitan Planning Organizations, public interest groups, industry representatives, other state agencies and others determined to be stakeholders in the process.

The Parties to this EAC are: Bamberg County, South Carolina Department of Health and Environmental Control (DHEC) and EPA.

**I. General Provisions**

- A. The parties commit to develop, implement and maintain the early action SIP (which includes the local early action plans) providing EPA defers the effective date of the non-attainment designation and related requirements as long as all conditions of the EAC and key milestones are met.
- B. If the potential area of non-attainment does not meet all the terms of the EAC, then it will forfeit its participation and will be subject to the full planning requirements under applicable CAA

traditional SIP processes including requirements defined as part of the EPA's 8-hour ozone implementation rulemaking.

- C. If the area has had the effective date of a non-attainment designation deferred and the area does not reach attainment of the standard by December 31, 2007, then the non-attainment designation will be effective. If the EPA's implementation schedule also requires a traditional SIP from areas on or before December 31, 2007, then a traditional SIP revision demonstrating attainment by the new attainment date will be due for the non-attainment area no later than December 31, 2008.
- D. Before formal adoption into the early action SIP, this agreement may be modified or terminated by mutual consent of all parties, or any party may withdraw from the agreement by notifying other parties in writing. If a party's withdrawal from the agreement prevents remaining signatories from satisfying any of the terms and milestones of the original agreement, the agreement will be void, any deferred effective date of the non-attainment designation would be withdrawn and the area's non-attainment designation would become effective soon after. Upon termination or withdrawal from the EAC, the area will be subject to the full planning requirements under applicable CAA traditional processes including requirements defined as part of the EPA's 8-hour ozone implementation rulemaking. The local government signatories will approve the local early action plans before submittal to DHEC for inclusion in the early action SIP. Once the local early action plan is incorporated into the early action SIP, any modifications will be treated as SIP revisions.
- E. Execution of this EAC by each Party shall be by signature of each Party's authorized representative. This agreement remains in effect until December 31, 2007.

## II. **Early Action Compact Requirements**

- A. **Milestones and Reporting**  
DHEC and local areas will assess progress towards developing and implementing the early action SIP and make a report available to EPA and the public every six months beginning in June 2003. As per EPA guidance, the key milestones for participation in the EAC are identified in the following table.

<b>Local Plan /Early Action SIP Milestones</b>		
<b>DATE</b>	<b>MILESTONE</b>	<b>RESPONSIBILITY</b>
<b>December 31, 2002</b>	EAC signed by all parties and submitted to EPA	Local/State/EPA
<b>June 16, 2003</b>	Discussion of control measures being considered to EPA	Local/State
<b>March 31, 2004</b>	Final local early action plan submitted to DHEC; copy to EPA	Local
<b>December 31, 2004</b>	Early Action State Implementation Plan submitted to EPA for incorporation into SIP	State
<b>April 1, 2005</b>	Local/State control strategies implemented no later than this date	Local/State
<b>September 30, 2005</b>	EPA takes final action on SIP submitted December 31, 2004	EPA
<b>June 30, 2006</b>	State submits progress report to EPA	State
<b>December 31, 2007</b>	Attainment of the 8-hour ozone standard	Local/State

B. Emissions Inventories

1. DHEC will be responsible for developing emissions inventories.
2. An initial modeling emissions inventory will be completed by December 31, 2002. This inventory includes:
  - a. Emissions modeling data for a 1998 episode that is representative of a typical ozone season exceedance that meets the EPA episode selection guidance;
  - b. MOBILE6 for determining on-road mobile emissions;
  - c. NONROAD model data; and,
  - d. Area source database utilizing population data allocated statewide.
3. A 2007 future year modeling emissions inventory will be developed by March 31, 2004. This inventory will sufficiently account for projected future growth in ozone precursor emissions through 2007, particularly from stationary, non-road and on-road mobile sources.
4. Additional inventories will be contingent upon legislative appropriations or other funding. Selection of specific episode inventories will be partially determined by the conceptual model, which reflects an analysis of meteorological conditions typical of high ozone events.
5. Emissions inventories will be compared and analyzed for trends in emission sources over time. The emissions inventory comparison and analysis will be completed by December 31, 2003.

C. Modeling

1. DHEC will be responsible for conducting the meteorological and air quality modeling analysis. DHEC will conduct the modeling analysis based on the "Draft Guidance on the use of Models and Other Analyses in Attainment Demonstrations for the 8-Hour Ozone NAAQS" (EPA-454/R-99-004, May 1999). The modeling will follow the guidance as facilitated by the EPA Regional Office.
2. Base case modeling will be completed by December 31, 2002. Future case modeling will be completed by October 31, 2003. One or more modeled control cases will be completed by January 31, 2004, with final revisions completed by March 31, 2004. All modeling will:
  - be SIP quality and perform within EPA's accepted margin of accuracy;
  - be carefully documented;
  - sufficiently account for projected future growth in ozone precursor emissions;
  - be accomplished by DHEC and reviewed by EPA; and,
  - be used to determine the effectiveness of NO<sub>x</sub> and/or VOC reductions. The control case(s) will be used to determine the relative effectiveness of different emission reduction strategies and to aid in the selection of appropriate emission reduction strategies.

D. Control Strategies

1. All adopted Federal and State control strategies that have been or will be implemented by the December 31, 2007, attainment date will be included in base, future and control case modeling.
2. Additional local and state control strategies under consideration will be identified by June 16, 2003. The local and state control strategies selected will be implemented as soon as practical, but no later than April 1, 2005.
3. Local and state control strategies will be specific, quantified, permanent and enforceable. The strategies will also include specific implementation dates and detailed documentation and reporting processes.
4. Voluntary strategies can play a supporting role in the local early action plan and the early action SIP. If emission reductions from voluntary strategies are quantified and credit is taken for them in the local early action plan or the early action SIP, those emission reductions will be enforceable. Additional strategies must be implemented to meet those quantified reduction requirements if quantified voluntary strategies fail. This is true for all quantified emission reductions.
5. Local and state control strategies will be designed and implemented with full stakeholder participation.

6. Local and state control strategies will be incorporated by DHEC into the early action SIP. In the event that the local area desires to add, delete or substitute strategies after early action SIP submittal, the local area will request a modification. Local early action plan modifications will be treated as SIP revisions and facilitated by DHEC.

E. Maintenance for Growth

1. The early action SIP will include a component to address emissions growth at least five years beyond December 31, 2007, ensuring that the areas will remain in attainment of the 8-hour ozone standard during that period. Attainment maintenance analysis will be completed by January 31, 2004, with final revisions completed by March 31, 2004. The analysis will employ one or more of the following or any other appropriate techniques necessary to make such a demonstration:
  - a. Modeling analysis showing ozone levels below the 8-hour ozone standard in 2012;
  - b. An annual review of growth (especially mobile and stationary source) to ensure control measures and growth assumptions are adequate;
  - c. Identification and quantification of federal, state, and/or local measures indicating sufficient reductions to offset growth estimates; or,
  - d. Any other appropriate techniques necessary to make such a determination.
2. The early action SIP must also detail a continuing planning process that includes modeling updates and modeling assumption verification (particularly growth assumptions). Modeling updates and planning processes must consider and evaluate the following:
  - a. All relevant actual new point sources;
  - b. Impacts from potential new source growth; and,
  - c. Future transportation patterns and their impact on air quality in a manner that is consistent with the most current adopted Long Range Transportation Plan and most current trend and projections of local motor vehicle emissions.
3. If the review of emissions growth in conjunction with the continuing planning process demonstrates that adopted emission reduction strategies are inadequate to address growth in emissions, additional measures will be added to the early action plan. Local planning processes should prepare for this possibility.
4. In the event that the continuing planning process identifies the need to add, delete, or substitute control strategies after the local early action plan has been incorporated into the early action SIP, the local area will initiate, and DHEC will facilitate a SIP revision to accommodate changes.

**F. Public Involvement**

1. Public involvement has been and will continue to be strongly encouraged during the planning and implementation process.
2. Public awareness programs will be used to provide opportunities for involvement in the planning process, implementation of control strategies, and any other issues important to the area.
3. Interested stakeholders (i.e., local, state, and federal government, citizens, public interest groups, and the business community) will continue to be involved in the planning process as early as possible. Planning meetings will be open to the public, with posted meeting times and locations. Early action SIP drafts will be publicly available, and the drafting process will have sufficient opportunities for comment from all interested stakeholders.
4. Opportunities for public comment on the proposed early action SIP will be provided and will follow the traditional SIP revision process as implemented by DHEC.
5. Semi-annual reports detailing, at a minimum, progress toward key milestones, will be made available to the public.
6. DHEC has established and will maintain a website for South Carolina's Early Action Plan for the 8-hour ozone standard, located at [www.scdhec.net/baq/eap.html](http://www.scdhec.net/baq/eap.html).

**III. Local Government Responsibilities**

The local governments agree to develop and implement a local early action plan that will promote the area's attainment by December 31, 2007, of the 8-hour ozone standard and maintenance until at least 2012. The local governments will develop this plan in coordination with the DHEC, EPA, stakeholders and the public. The local early action plan will include a process to evaluate the effectiveness and maintain long-term compliance with the standard.

After all adopted Federal and State controls that have been or will be implemented by the attainment date of December 31, 2007, are accounted for in the modeling, the local area must adopt additional local controls, as necessary to demonstrate attainment of the 8-hour ozone standard by December 31, 2007. Local controls under consideration must be identified and described by June 16, 2003. These measures must be included in the semi-annual report made available to the public.

The draft local early action plan will be submitted to DHEC by August 31, 2003. The final local early action plan will be submitted to DHEC, with a copy forwarded to EPA, by March 31, 2004. The adopted local early action plan will be included in the early action SIP due December 31, 2004.

In the event a development or issue arises that may impact performance or progress toward key milestones (including if a key milestone will be or has been missed and/or if a termination or modification has been requested), the responsible party will notify all other signatories in writing as soon as possible.

#### **IV. The South Carolina Department of Health and Environmental Control**

DHEC agrees to develop and implement a state early action SIP that will demonstrate the participating area's attainment by December 31, 2007, of the 8-hour ozone standard and maintenance until at least 2012. DHEC will develop this plan in coordination with the local governments, EPA, stakeholders and the public. The state early action SIP will include a process to monitor and maintain long-term compliance with the standard.

It is the responsibility of each state under the CAA to ensure attainment with all National Ambient Air Quality Standards. At any such time that an area is deemed non-attainment, the state will be required to develop a plan to return the area(s) to attainment in accordance with the CAA. If applicable, South Carolina is committed to working with adjacent states to assure mutual attainment of national standards.

In the event a development or issue arises that may impact performance or progress toward key milestones (including if a key milestone will be or has been missed and/or if a termination or modification has been requested), DHEC will notify all other signatories in writing as soon as possible.

DHEC will provide support to areas throughout the planning and implementation process by:

1. Developing emission inventories, modeling, trend analysis, and quantification and comparison of control measures.
2. Providing necessary information on all federal and state adopted emission reduction measures, which affect the area.
3. Providing technical and strategic assistance, as appropriate, in the selection and implementation of control strategies.
4. Providing technical and planning assistance in developing and implementing processes to address the impact of emissions growth beyond the attainment date.
5. Maintaining monitors and reporting and analysis of monitoring data.
6. Promoting public awareness efforts.
7. Coordinating communication between local areas and the EPA to facilitate continuing the EPA review of local work.
8. Ensuring expeditious review of local early action plan(s), and if deemed adequate, proposing modification of the early action SIP to adopt the early action plan.

9. Adopting control measures into the early action SIP as expeditiously as possible. The final complete early action SIP revision must be completed, adopted, and submitted by the state to the EPA by December 31, 2004.
10. Tracking progress. If any milestone is missed and EPA withdraws the deferred effective date, thereby triggering a non-attainment designation and applicable statutory requirements, the state will strive to submit a traditional non-attainment SIP within one year. However, due to the South Carolina legislative review process, it may take at least eighteen months.
11. Working concurrently with areas not electing to participate in the early action SIP process in preparing the traditional SIP submittal as required by the CAA.

## **V. The Environmental Protection Agency**

The EPA will participate by:

1. Recognizing the local area's and state's commitment to voluntarily adopt an early, substantive, enforceable, and scientifically-based attainment plan with early implementation of control measures by becoming a party to the EAC developed in conformance with South Carolina's Protocol for Early Action Compacts.
2. Providing technical assistance to the state(s) and local area(s) in the development of the early action plan.
3. Reviewing and approving the completed early action SIP by no later than September 30, 2005.
4. Deferring the effective date of non-attainment designation and related requirements for participating areas that fail to meet the 8-hour ozone standard as long as all terms and key milestones of the EAC are being met, including submission of the early action SIP revision by December 31, 2004.
5. Designating the area expeditiously as attainment and imposing no additional requirements, provided that the monitors in the area reflect attainment by December 31, 2007.
6. Taking action to withdraw the deferred effective date if the area violates the standard as of December 31, 2007, and the area has had the effective date of its non-attainment designation deferred. The area's non-attainment designation will become effective soon after.
7. Ensuring appropriate credit in the traditional SIP process for all emissions reductions from measures implemented in the early action SIP if the area does not meet all the terms of the EAC; including meeting agreed-upon key milestones and is designated (or re-designated if necessary) according to the EPA's 8-hour ozone implementation guidelines. The EPA will offer such an area no delays, exemptions, or other favorable treatment because of its participation in the EAC.

8. Not allowing any area to renew their EAC after December 31, 2007, or initiate a new compact if it has previously forfeited its participation.

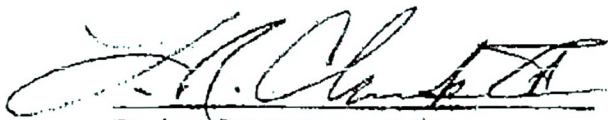
VI. Signatures

  
United States Environmental Protection Agency

Regional Administrator DEC 31 2002  
Title Date

R. Lewis Shan  
South Carolina  
Department of Health and Environmental Control

Deputy Commissioner 12/30/02  
Title Date

  
Barnberg County Representative

County Administrator 12-30-02  
Title Date

**SOUTH CAROLINA'S 8-HOUR OZONE  
EARLY ACTION COMPACT  
Barnwell County**

The United States Environmental Protection Agency (EPA) has provided an option for areas currently meeting the 1-hour ozone standard, like those in South Carolina, to attain the 8-hour ozone standard by December 31, 2007, and obtain cleaner air sooner than federally mandated. This option offers a more expeditious time line for achieving emissions reductions than expected under the EPA's 8-hour ozone implementation rulemaking, while providing "fail-safe" provisions for the area to revert to the traditional State Implementation Plan (SIP) process if specific milestones are not met. Through the development of this Early Action Compact (EAC), local, state, and EPA officials agree to work together to develop and implement local and state early action plans. The plans will become a part of the state early action SIP to reduce ground-level ozone concentrations to comply with the 8-hour ozone standard by December 31, 2007, and maintain the standard beyond that date. Failure to meet the obligations outlined in this EAC will result in immediate reversion to the traditional non-attainment designation process as required in the Clean Air Act (CAA).

In an effort to provide this information to areas within South Carolina, the South Carolina Department of Health and Environmental Control (DHEC) held six public meetings throughout the state. The locations of the meetings were targeted to areas that could potentially be designated as non-attainment for the 8-hour ozone standard. The meetings were held in Columbia, Greenville, Florence, Rock Hill, Aiken and Charleston. EPA officials participated in five of the six meetings. The general public, local government representatives, industry representatives, and environmental interest groups attended the meetings. Prior to the meetings, DHEC issued a press release regarding the development of an early action SIP. Correspondence including a fact sheet was sent to all county administrators, Councils of Governments, Metropolitan Planning Organizations, public interest groups, industry representatives, other state agencies and others determined to be stakeholders in the process.

The Parties to this (EAC) are: Barnwell County, South Carolina Department of Health and Environmental Control (DHEC) and EPA.

**I. General Provisions**

- A. The parties commit to develop, implement and maintain the early action SIP (which includes the local early action plans) providing EPA defers the effective date of the non-attainment designation and related requirements as long as all conditions of the EAC and key milestones are met.
- B. If the potential area of non-attainment does not meet all the terms of the EAC, then it will forfeit its participation and will be subject to the full planning requirements under applicable CAA

traditional SIP processes including requirements defined as part of the EPA's 8-hour ozone implementation rulemaking.

- C. If the area has had the effective date of a non-attainment designation deferred and the area does not reach attainment of the standard by December 31, 2007, then the non-attainment designation will be effective. If the EPA's implementation schedule also requires a traditional SIP from areas on or before December 31, 2007, then a traditional SIP revision demonstrating attainment by the new attainment date will be due for the non-attainment area no later than December 31, 2008.
- D. Before formal adoption into the early action SIP, this agreement may be modified or terminated by mutual consent of all parties, or any party may withdraw from the agreement by notifying other parties in writing. If a party's withdrawal from the agreement prevents remaining signatories from satisfying any of the terms and milestones of the original agreement, the agreement will be void, any deferred effective date of the non-attainment designation would be withdrawn and the area's non-attainment designation would become effective soon after. Upon termination or withdrawal from the EAC, the area will be subject to the full planning requirements under applicable CAA traditional processes including requirements defined as part of the EPA's 8-hour ozone implementation rulemaking. The local government signatories will approve the local early action plans before submittal to DHEC for inclusion in the early action SIP. Once the local early action plan is incorporated into the early action SIP, any modifications will be treated as SIP revisions.
- E. Execution of this EAC by each Party shall be by signature of each Party's authorized representative. This agreement remains in effect until December 31, 2007.

## II. **Early Action Compact Requirements**

- A. **Milestones and Reporting**  
DHEC and local areas will assess progress towards developing and implementing the early action SIP and make a report available to EPA and the public every six months beginning in June 2003. As per EPA guidance, the key milestones for participation in the EAC are identified in the following table.

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B. Emissions Inventories

1. DHEC will be responsible for developing emissions inventories.
2. An initial modeling emissions inventory will be completed by December 31, 2002. This inventory includes:
  - a. Emissions modeling data for a 1998 episode that is representative of a typical ozone season exceedance that meets the EPA episode selection guidance;
  - b. MOBILE6 for determining on-road mobile emissions;
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2. The early action SIP must also detail a continuing planning process that includes modeling updates and modeling assumption verification (particularly growth assumptions). Modeling updates and planning processes must consider and evaluate the following:
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3. If the review of emissions growth in conjunction with the continuing planning process demonstrates that adopted emission reduction strategies are inadequate to address growth in emissions, additional measures will be added to the early action plan. Local planning processes should prepare for this possibility.
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9. Adopting control measures into the early action SIP as expeditiously as possible. The final complete early action SIP revision must be completed, adopted, and submitted by the state to the EPA by December 31, 2004.
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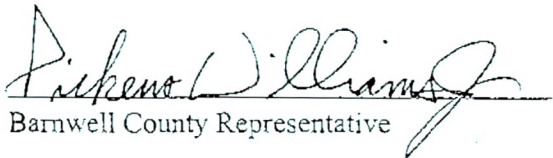
**VI. Signatures**

  
United States Environmental Protection Agency

Regional Administrator 12-30-02  
Title Date

  
South Carolina  
Department of Health and Environmental Control

Deputy Commissioner 12/20/02  
Title Date

  
Barnwell County Representative

County Admin. 11/27/02  
Title Date

**SOUTH CAROLINA'S 8-HOUR OZONE  
EARLY ACTION COMPACT**  
Calhoun County

The United States Environmental Protection Agency (EPA) has provided an option for areas currently meeting the 1-hour ozone standard, like those in South Carolina, to attain the 8-hour ozone standard by December 31, 2007, and obtain cleaner air sooner than federally mandated. This option offers a more expeditious time line for achieving emissions reductions than expected under the EPA's 8-hour ozone implementation rulemaking, while providing "fail-safe" provisions for the area to revert to the traditional State Implementation Plan (SIP) process if specific milestones are not met. Through the development of this Early Action Compact (EAC), local, state, and EPA officials agree to work together to develop and implement local and state early action plans. The plans will become a part of the state early action SIP to reduce ground-level ozone concentrations to comply with the 8-hour ozone standard by December 31, 2007, and maintain the standard beyond that date. Failure to meet the obligations outlined in this EAC will result in immediate reversion to the traditional non-attainment designation process as required in the Clean Air Act (CAA).

In an effort to provide this information to areas within South Carolina, the South Carolina Department of Health and Environmental Control (DHEC) held six public meetings throughout the state. The locations of the meetings were targeted to areas that could potentially be designated as non-attainment for the 8-hour ozone standard. The meetings were held in Columbia, Greenville, Florence, Rock Hill, Aiken and Charleston. EPA officials participated in five of the six meetings. The general public, local government representatives, industry representatives, and environmental interest groups attended the meetings. Prior to the meetings, DHEC issued a press release regarding the development of an early action SIP. Correspondence including a fact sheet was sent to all county administrators, Councils of Governments, Metropolitan Planning Organizations, public interest groups, industry representatives, other state agencies and others determined to be stakeholders in the process.

The Parties to this EAC are: Calhoun County, South Carolina Department of Health and Environmental Control (DHEC) and EPA.

**I. General Provisions**

- A. The parties commit to develop, implement and maintain the early action SIP (which includes the local early action plans) providing EPA defers the effective date of the non-attainment designation and related requirements as long as all conditions of the EAC and key milestones are met.
- B. If the potential area of non-attainment does not meet all the terms of the EAC, then it will forfeit its participation and will be subject to the full planning requirements under applicable CAA

traditional SIP processes including requirements defined as part of the EPA's 8-hour ozone implementation rulemaking.

- C. If the area has had the effective date of a non-attainment designation deferred and the area does not reach attainment of the standard by December 31, 2007, then the non-attainment designation will be effective. If the EPA's implementation schedule also requires a traditional SIP from areas on or before December 31, 2007, then a traditional SIP revision demonstrating attainment by the new attainment date will be due for the non-attainment area no later than December 31, 2008.
- D. Before formal adoption into the early action SIP, this agreement may be modified or terminated by mutual consent of all parties, or any party may withdraw from the agreement by notifying other parties in writing. If a party's withdrawal from the agreement prevents remaining signatories from satisfying any of the terms and milestones of the original agreement, the agreement will be void, any deferred effective date of the non-attainment designation would be withdrawn and the area's non-attainment designation would become effective soon after. Upon termination or withdrawal from the EAC, the area will be subject to the full planning requirements under applicable CAA traditional processes including requirements defined as part of the EPA's 8-hour ozone implementation rulemaking. The local government signatories will approve the local early action plans before submittal to DHEC for inclusion in the early action SIP. Once the local early action plan is incorporated into the early action SIP, any modifications will be treated as SIP revisions.
- E. Execution of this EAC by each Party shall be by signature of each Party's authorized representative. This agreement remains in effect until December 31, 2007.

## II. **Early Action Compact Requirements**

- A. **Milestones and Reporting**  
DHEC and local areas will assess progress towards developing and implementing the early action SIP and make a report available to EPA and the public every six months beginning in June 2003. As per EPA guidance, the key milestones for participation in the EAC are identified in the following table.

<b>Local Plan /Early Action SIP Milestones</b>		
<b>DATE</b>	<b>MILESTONE</b>	<b>RESPONSIBILITY</b>
<b>December 31, 2002</b>	EAC signed by all parties and submitted to EPA	Local/State/EPA
<b>June 16, 2003</b>	Discussion of control measures being considered to EPA	Local/State
<b>March 31, 2004</b>	Final local early action plan submitted to DHEC; copy to EPA	Local
<b>December 31, 2004</b>	Early Action State Implementation Plan submitted to EPA for incorporation into SIP	State
<b>April 1, 2005</b>	Local/State control strategies implemented no later than this date	Local/State
<b>September 30, 2005</b>	EPA takes final action on SIP submitted December 31, 2004	EPA
<b>June 30, 2006</b>	State submits progress report to EPA	State
<b>December 31, 2007</b>	Attainment of the 8-hour ozone standard	Local/State

B. Emissions Inventories

1. DHEC will be responsible for developing emissions inventories.
2. An initial modeling emissions inventory will be completed by December 31, 2002. This inventory includes:
  - a. Emissions modeling data for a 1998 episode that is representative of a typical ozone season exceedance that meets the EPA episode selection guidance;
  - b. MOBILE6 for determining on-road mobile emissions;
  - c. NONROAD model data; and,
  - d. Area source database utilizing population data allocated statewide.
3. A 2007 future year modeling emissions inventory will be developed by March 31, 2004. This inventory will sufficiently account for projected future growth in ozone precursor emissions through 2007, particularly from stationary, non-road and on-road mobile sources.
4. Additional inventories will be contingent upon legislative appropriations or other funding. Selection of specific episode inventories will be partially determined by the conceptual model, which reflects an analysis of meteorological conditions typical of high ozone events.
5. Emissions inventories will be compared and analyzed for trends in emission sources over time. The emissions inventory comparison and analysis will be completed by December 31, 2003.

C. Modeling

1. DHEC will be responsible for conducting the meteorological and air quality modeling analysis. DHEC will conduct the modeling analysis based on the "Draft Guidance on the use of Models and Other Analyses in Attainment Demonstrations for the 8-Hour Ozone NAAQS" (EPA-454/R-99-004, May 1999). The modeling will follow the guidance as facilitated by the EPA Regional Office.
2. Base case modeling will be completed by December 31, 2002. Future case modeling will be completed by October 31, 2003. One or more modeled control cases will be completed by January 31, 2004, with final revisions completed by March 31, 2004. All modeling will:
  - be SIP quality and perform within EPA's accepted margin of accuracy;
  - be carefully documented;
  - sufficiently account for projected future growth in ozone precursor emissions;
  - be accomplished by DHEC and reviewed by EPA; and,
  - be used to determine the effectiveness of NO<sub>x</sub> and/or VOC reductions. The control case(s) will be used to determine the relative effectiveness of different emission reduction strategies and to aid in the selection of appropriate emission reduction strategies.

D. Control Strategies

1. All adopted Federal and State control strategies that have been or will be implemented by the December 31, 2007, attainment date will be included in base, future and control case modeling.
2. Additional local and state control strategies under consideration will be identified by June 16, 2003. The local and state control strategies selected will be implemented as soon as practical, but no later than April 1, 2005.
3. Local and state control strategies will be specific, quantified, permanent and enforceable. The strategies will also include specific implementation dates and detailed documentation and reporting processes.
4. Voluntary strategies can play a supporting role in the local early action plan and the early action SIP. If emission reductions from voluntary strategies are quantified and credit is taken for them in the local early action plan or the early action SIP, those emission reductions will be enforceable. Additional strategies must be implemented to meet those quantified reduction requirements if quantified voluntary strategies fail. This is true for all quantified emission reductions.
5. Local and state control strategies will be designed and implemented with full stakeholder participation.

6. Local and state control strategies will be incorporated by DHEC into the early action SIP. In the event that the local area desires to add, delete or substitute strategies after early action SIP submittal, the local area will request a modification. Local early action plan modifications will be treated as SIP revisions and facilitated by DHEC.

E. Maintenance for Growth

1. The early action SIP will include a component to address emissions growth at least five years beyond December 31, 2007, ensuring that the areas will remain in attainment of the 8-hour ozone standard during that period. Attainment maintenance analysis will be completed by January 31, 2004, with final revisions completed by March 31, 2004. The analysis will employ one or more of the following or any other appropriate techniques necessary to make such a demonstration:
  - a. Modeling analysis showing ozone levels below the 8-hour ozone standard in 2012;
  - b. An annual review of growth (especially mobile and stationary source) to ensure control measures and growth assumptions are adequate;
  - c. Identification and quantification of federal, state, and/or local measures indicating sufficient reductions to offset growth estimates; or,
  - d. Any other appropriate techniques necessary to make such a determination.
2. The early action SIP must also detail a continuing planning process that includes modeling updates and modeling assumption verification (particularly growth assumptions). Modeling updates and planning processes must consider and evaluate the following:
  - a. All relevant actual new point sources;
  - b. Impacts from potential new source growth; and,
  - c. Future transportation patterns and their impact on air quality in a manner that is consistent with the most current adopted Long Range Transportation Plan and most current trend and projections of local motor vehicle emissions.
3. If the review of emissions growth in conjunction with the continuing planning process demonstrates that adopted emission reduction strategies are inadequate to address growth in emissions, additional measures will be added to the early action plan. Local planning processes should prepare for this possibility.
4. In the event that the continuing planning process identifies the need to add, delete, or substitute control strategies after the local early action plan has been incorporated into the early action SIP, the local area will initiate, and DHEC will facilitate a SIP revision to accommodate changes.

**F. Public Involvement**

1. Public involvement has been and will continue to be strongly encouraged during the planning and implementation process.
2. Public awareness programs will be used to provide opportunities for involvement in the planning process, implementation of control strategies, and any other issues important to the area.
3. Interested stakeholders (i.e., local, state, and federal government, citizens, public interest groups, and the business community) will continue to be involved in the planning process as early as possible. Planning meetings will be open to the public, with posted meeting times and locations. Early action SIP drafts will be publicly available, and the drafting process will have sufficient opportunities for comment from all interested stakeholders.
4. Opportunities for public comment on the proposed early action SIP will be provided and will follow the traditional SIP revision process as implemented by DHEC.
5. Semi-annual reports detailing, at a minimum, progress toward key milestones, will be made available to the public.
6. DHEC has established and will maintain a website for South Carolina's Early Action Plan for the 8-hour ozone standard, located at [www.scdhec.net/baq/eap.html](http://www.scdhec.net/baq/eap.html).

**III. Local Government Responsibilities**

The local governments agree to develop and implement a local early action plan that will promote the area's attainment by December 31, 2007, of the 8-hour ozone standard and maintenance until at least 2012. The local governments will develop this plan in coordination with the DHEC, EPA, stakeholders and the public. The local early action plan will include a process to evaluate the effectiveness and maintain long-term compliance with the standard.

After all adopted Federal and State controls that have been or will be implemented by the attainment date of December 31, 2007, are accounted for in the modeling, the local area must adopt additional local controls, as necessary to demonstrate attainment of the 8-hour ozone standard by December 31, 2007. Local controls under consideration must be identified and described by June 16, 2003. These measures must be included in the semi-annual report made available to the public.

The draft local early action plan will be submitted to DHEC by August 31, 2003. The final local early action plan will be submitted to DHEC, with a copy forwarded to EPA, by March 31, 2004. The adopted local early action plan will be included in the early action SIP due December 31, 2004.

In the event a development or issue arises that may impact performance or progress toward key milestones (including if a key milestone will be or has been missed and/or if a termination or modification has been requested), the responsible party will notify all other signatories in writing as soon as possible.

#### **IV. The South Carolina Department of Health and Environmental Control**

DHEC agrees to develop and implement a state early action SIP that will demonstrate the participating area's attainment by December 31, 2007, of the 8-hour ozone standard and maintenance until at least 2012. DHEC will develop this plan in coordination with the local governments, EPA, stakeholders and the public. The state early action SIP will include a process to monitor and maintain long-term compliance with the standard.

It is the responsibility of each state under the CAA to ensure attainment with all National Ambient Air Quality Standards. At any such time that an area is deemed non-attainment, the state will be required to develop a plan to return the area(s) to attainment in accordance with the CAA. If applicable, South Carolina is committed to working with adjacent states to assure mutual attainment of national standards.

In the event a development or issue arises that may impact performance or progress toward key milestones (including if a key milestone will be or has been missed and/or if a termination or modification has been requested), DHEC will notify all other signatories in writing as soon as possible.

DHEC will provide support to areas throughout the planning and implementation process by:

1. Developing emission inventories, modeling, trend analysis, and quantification and comparison of control measures.
2. Providing necessary information on all federal and state adopted emission reduction measures, which affect the area.
3. Providing technical and strategic assistance, as appropriate, in the selection and implementation of control strategies.
4. Providing technical and planning assistance in developing and implementing processes to address the impact of emissions growth beyond the attainment date.
5. Maintaining monitors and reporting and analysis of monitoring data.
6. Promoting public awareness efforts.
7. Coordinating communication between local areas and the EPA to facilitate continuing the EPA review of local work.
8. Ensuring expeditious review of local early action plan(s), and if deemed adequate, proposing modification of the early action SIP to adopt the early action plan.

9. Adopting control measures into the early action SIP as expeditiously as possible. The final complete early action SIP revision must be completed, adopted, and submitted by the state to the EPA by December 31, 2004.
10. Tracking progress. If any milestone is missed and EPA withdraws the deferred effective date, thereby triggering a non-attainment designation and applicable statutory requirements, the state will strive to submit a traditional non-attainment SIP within one year. However, due to the South Carolina legislative review process, it may take at least eighteen months.
11. Working concurrently with areas not electing to participate in the early action SIP process in preparing the traditional SIP submittal as required by the CAA.

## **V. The Environmental Protection Agency**

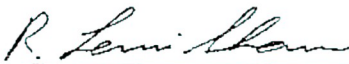
The EPA will participate by:


1. Recognizing the local area's and state's commitment to voluntarily adopt an early, substantive, enforceable, and scientifically-based attainment plan with early implementation of control measures by becoming a party to the EAC developed in conformance with South Carolina's Protocol for Early Action Compacts.
2. Providing technical assistance to the state(s) and local area(s) in the development of the early action plan.
3. Reviewing and approving the completed early action SIP by no later than September 30, 2005.
4. Deferring the effective date of non-attainment designation and related requirements for participating areas that fail to meet the 8-hour ozone standard as long as all terms and key milestones of the EAC are being met, including submission of the early action SIP revision by December 31, 2004.
5. Designating the area expeditiously as attainment and imposing no additional requirements, provided that the monitors in the area reflect attainment by December 31, 2007.
6. Taking action to withdraw the deferred effective date if the area violates the standard as of December 31, 2007, and the area has had the effective date of its non-attainment designation deferred. The area's non-attainment designation will become effective soon after.
7. Ensuring appropriate credit in the traditional SIP process for all emissions reductions from measures implemented in the early action SIP if the area does not meet all the terms of the EAC; including meeting agreed-upon key milestones and is designated (or re-designated if necessary) according to the EPA's 8-hour ozone implementation guidelines. The EPA will offer such an area no delays, exemptions, or other favorable treatment because of its participation in the EAC.

8. Not allowing any area to renew their EAC after December 31, 2007, or initiate a new compact if it has previously forfeited its participation.

VI. Signatures

  
United States Environmental Protection Agency      Regional Administrator      12-30-02  
Title      Date

  
South Carolina      Deputy Commissioner      12/20/02  
Department of Health and Environmental Control      Title      Date

 (Chairman)  
Calhoun County County Representative Title      12/17/02      \_\_\_\_\_  
Date

**SOUTH CAROLINA'S 8-HOUR OZONE  
EARLY ACTION COMPACT**  
Orangeburg County

The United States Environmental Protection Agency (EPA) has provided an option for areas currently meeting the 1-hour ozone standard, like those in South Carolina, to attain the 8-hour ozone standard by December 31, 2007, and obtain cleaner air sooner than federally mandated. This option offers a more expeditious time line for achieving emissions reductions than expected under the EPA's 8-hour ozone implementation rulemaking, while providing "fail-safe" provisions for the area to revert to the traditional State Implementation Plan (SIP) process if specific milestones are not met. Through the development of this Early Action Compact (EAC), local, state, and EPA officials agree to work together to develop and implement local and state early action plans. The plans will become a part of the state early action SIP to reduce ground-level ozone concentrations to comply with the 8-hour ozone standard by December 31, 2007, and maintain the standard beyond that date. Failure to meet the obligations outlined in this EAC will result in immediate reversion to the traditional non-attainment designation process as required in the Clean Air Act (CAA).

In an effort to provide this information to areas within South Carolina, the South Carolina Department of Health and Environmental Control (DHEC) held six public meetings throughout the state. The locations of the meetings were targeted to areas that could potentially be designated as non-attainment for the 8-hour ozone standard. The meetings were held in Columbia, Greenville, Florence, Rock Hill, Aiken and Charleston. EPA officials participated in five of the six meetings. The general public, local government representatives, industry representatives, and environmental interest groups attended the meetings. Prior to the meetings, DHEC issued a press release regarding the development of an early action SIP. Correspondence including a fact sheet was sent to all county administrators, Councils of Governments, Metropolitan Planning Organizations, public interest groups, industry representatives, other state agencies and others determined to be stakeholders in the process.

The Parties to this EAC are: Orangeburg County, South Carolina Department of Health and Environmental Control (DHEC) and EPA.

**I. General Provisions**

- A. The parties commit to develop, implement and maintain the early action SIP (which includes the local early action plans) providing EPA defers the effective date of the non-attainment designation and related requirements as long as all conditions of the EAC and key milestones are met.
- B. If the potential area of non-attainment does not meet all the terms of the EAC, then it will forfeit its participation and will be subject to the full planning requirements under applicable CAA

traditional SIP processes including requirements defined as part of the EPA's 8-hour ozone implementation rulemaking.

- C. If the area has had the effective date of a non-attainment designation deferred and the area does not reach attainment of the standard by December 31, 2007, then the non-attainment designation will be effective. If the EPA's implementation schedule also requires a traditional SIP from areas on or before December 31, 2007, then a traditional SIP revision demonstrating attainment by the new attainment date will be due for the non-attainment area no later than December 31, 2008.
- D. Before formal adoption into the early action SIP, this agreement may be modified or terminated by mutual consent of all parties, or any party may withdraw from the agreement by notifying other parties in writing. If a party's withdrawal from the agreement prevents remaining signatories from satisfying any of the terms and milestones of the original agreement, the agreement will be void, any deferred effective date of the non-attainment designation would be withdrawn and the area's non-attainment designation would become effective soon after. Upon termination or withdrawal from the EAC, the area will be subject to the full planning requirements under applicable CAA traditional processes including requirements defined as part of the EPA's 8-hour ozone implementation rulemaking. The local government signatories will approve the local early action plans before submittal to DHEC for inclusion in the early action SIP. Once the local early action plan is incorporated into the early action SIP, any modifications will be treated as SIP revisions.
- E. Execution of this EAC by each Party shall be by signature of each Party's authorized representative. This agreement remains in effect until December 31, 2007.

## II. **Early Action Compact Requirements**

- A. **Milestones and Reporting**  
DHEC and local areas will assess progress towards developing and implementing the early action SIP and make a report available to EPA and the public every six months beginning in June 2003. As per EPA guidance, the key milestones for participation in the EAC are identified in the following table.

<b>Local Plan /Early Action SIP Milestones</b>		
<b>DATE</b>	<b>MILESTONE</b>	<b>RESPONSIBILITY</b>
<b>December 31, 2002</b>	EAC signed by all parties and submitted to EPA	Local/State/EPA
<b>June 16, 2003</b>	Discussion of control measures being considered to EPA	Local/State
<b>March 31, 2004</b>	Final local early action plan submitted to DHEC; copy to EPA	Local
<b>December 31, 2004</b>	Early Action State Implementation Plan submitted to EPA for incorporation into SIP	State
<b>April 1, 2005</b>	Local/State control strategies implemented no later than this date	Local/State
<b>September 30, 2005</b>	EPA takes final action on SIP submitted December 31, 2004	EPA
<b>June 30, 2006</b>	State submits progress report to EPA	State
<b>December 31, 2007</b>	Attainment of the 8-hour ozone standard	Local/State

B. Emissions Inventories

1. DHEC will be responsible for developing emissions inventories.
2. An initial modeling emissions inventory will be completed by December 31, 2002. This inventory includes:
  - a. Emissions modeling data for a 1998 episode that is representative of a typical ozone season exceedance that meets the EPA episode selection guidance;
  - b. MOBILE6 for determining on-road mobile emissions;
  - c. NONROAD model data; and,
  - d. Area source database utilizing population data allocated statewide.
3. A 2007 future year modeling emissions inventory will be developed by March 31, 2004. This inventory will sufficiently account for projected future growth in ozone precursor emissions through 2007, particularly from stationary, non-road and on-road mobile sources.
4. Additional inventories will be contingent upon legislative appropriations or other funding. Selection of specific episode inventories will be partially determined by the conceptual model, which reflects an analysis of meteorological conditions typical of high ozone events.
5. Emissions inventories will be compared and analyzed for trends in emission sources over time. The emissions inventory comparison and analysis will be completed by December 31, 2003.

C. Modeling

1. DHEC will be responsible for conducting the meteorological and air quality modeling analysis. DHEC will conduct the modeling analysis based on the "Draft Guidance on the use of Models and Other Analyses in Attainment Demonstrations for the 8-Hour Ozone NAAQS" (EPA-454/R-99-004, May 1999). The modeling will follow the guidance as facilitated by the EPA Regional Office.
2. Base case modeling will be completed by December 31, 2002. Future case modeling will be completed by October 31, 2003. One or more modeled control cases will be completed by January 31, 2004, with final revisions completed by March 31, 2004. All modeling will:
  - be SIP quality and perform within EPA's accepted margin of accuracy;
  - be carefully documented;
  - sufficiently account for projected future growth in ozone precursor emissions;
  - be accomplished by DHEC and reviewed by EPA; and,
  - be used to determine the effectiveness of NO<sub>x</sub> and/or VOC reductions. The control case(s) will be used to determine the relative effectiveness of different emission reduction strategies and to aid in the selection of appropriate emission reduction strategies.

D. Control Strategies

1. All adopted Federal and State control strategies that have been or will be implemented by the December 31, 2007, attainment date will be included in base, future and control case modeling.
2. Additional local and state control strategies under consideration will be identified by June 16, 2003. The local and state control strategies selected will be implemented as soon as practical, but no later than April 1, 2005.
3. Local and state control strategies will be specific, quantified, permanent and enforceable. The strategies will also include specific implementation dates and detailed documentation and reporting processes.
4. Voluntary strategies can play a supporting role in the local early action plan and the early action SIP. If emission reductions from voluntary strategies are quantified and credit is taken for them in the local early action plan or the early action SIP, those emission reductions will be enforceable. Additional strategies must be implemented to meet those quantified reduction requirements if quantified voluntary strategies fail. This is true for all quantified emission reductions.
5. Local and state control strategies will be designed and implemented with full stakeholder participation.

6. Local and state control strategies will be incorporated by DHEC into the early action SIP. In the event that the local area desires to add, delete or substitute strategies after early action SIP submittal, the local area will request a modification. Local early action plan modifications will be treated as SIP revisions and facilitated by DHEC.

E. Maintenance for Growth

1. The early action SIP will include a component to address emissions growth at least five years beyond December 31, 2007, ensuring that the areas will remain in attainment of the 8-hour ozone standard during that period. Attainment maintenance analysis will be completed by January 31, 2004, with final revisions completed by March 31, 2004. The analysis will employ one or more of the following or any other appropriate techniques necessary to make such a demonstration:
  - a. Modeling analysis showing ozone levels below the 8-hour ozone standard in 2012;
  - b. An annual review of growth (especially mobile and stationary source) to ensure control measures and growth assumptions are adequate;
  - c. Identification and quantification of federal, state, and/or local measures indicating sufficient reductions to offset growth estimates; or,
  - d. Any other appropriate techniques necessary to make such a determination.
2. The early action SIP must also detail a continuing planning process that includes modeling updates and modeling assumption verification (particularly growth assumptions). Modeling updates and planning processes must consider and evaluate the following:
  - a. All relevant actual new point sources;
  - b. Impacts from potential new source growth; and,
  - c. Future transportation patterns and their impact on air quality in a manner that is consistent with the most current adopted Long Range Transportation Plan and most current trend and projections of local motor vehicle emissions.
3. If the review of emissions growth in conjunction with the continuing planning process demonstrates that adopted emission reduction strategies are inadequate to address growth in emissions, additional measures will be added to the early action plan. Local planning processes should prepare for this possibility.
4. In the event that the continuing planning process identifies the need to add, delete, or substitute control strategies after the local early action plan has been incorporated into the early action SIP, the local area will initiate, and DHEC will facilitate a SIP revision to accommodate changes.

**F. Public Involvement**

1. Public involvement has been and will continue to be strongly encouraged during the planning and implementation process.
2. Public awareness programs will be used to provide opportunities for involvement in the planning process, implementation of control strategies, and any other issues important to the area.
3. Interested stakeholders (i.e., local, state, and federal government, citizens, public interest groups, and the business community) will continue to be involved in the planning process as early as possible. Planning meetings will be open to the public, with posted meeting times and locations. Early action SIP drafts will be publicly available, and the drafting process will have sufficient opportunities for comment from all interested stakeholders.
4. Opportunities for public comment on the proposed early action SIP will be provided and will follow the traditional SIP revision process as implemented by DHEC.
5. Semi-annual reports detailing, at a minimum, progress toward key milestones, will be made available to the public.
6. DHEC has established and will maintain a website for South Carolina's Early Action Plan for the 8-hour ozone standard, located at [www.scdhec.net/baq/eap.html](http://www.scdhec.net/baq/eap.html).

**III. Local Government Responsibilities**

The local governments agree to develop and implement a local early action plan that will promote the area's attainment by December 31, 2007, of the 8-hour ozone standard and maintenance until at least 2012. The local governments will develop this plan in coordination with the DHEC, EPA, stakeholders and the public. The local early action plan will include a process to evaluate the effectiveness and maintain long-term compliance with the standard.

After all adopted Federal and State controls that have been or will be implemented by the attainment date of December 31, 2007, are accounted for in the modeling, the local area must adopt additional local controls, as necessary to demonstrate attainment of the 8-hour ozone standard by December 31, 2007. Local controls under consideration must be identified and described by June 16, 2003. These measures must be included in the semi-annual report made available to the public.

The draft local early action plan will be submitted to DHEC by August 31, 2003. The final local early action plan will be submitted to DHEC, with a copy forwarded to EPA, by March 31, 2004. The adopted local early action plan will be included in the early action SIP due December 31, 2004.

In the event a development or issue arises that may impact performance or progress toward key milestones (including if a key milestone will be or has been missed and/or if a termination or modification has been requested), the responsible party will notify all other signatories in writing as soon as possible.

#### **IV. The South Carolina Department of Health and Environmental Control**

DHEC agrees to develop and implement a state early action SIP that will demonstrate the participating area's attainment by December 31, 2007, of the 8-hour ozone standard and maintenance until at least 2012. DHEC will develop this plan in coordination with the local governments, EPA, stakeholders and the public. The state early action SIP will include a process to monitor and maintain long-term compliance with the standard.

It is the responsibility of each state under the CAA to ensure attainment with all National Ambient Air Quality Standards. At any such time that an area is deemed non-attainment, the state will be required to develop a plan to return the area(s) to attainment in accordance with the CAA. If applicable, South Carolina is committed to working with adjacent states to assure mutual attainment of national standards.

In the event a development or issue arises that may impact performance or progress toward key milestones (including if a key milestone will be or has been missed and/or if a termination or modification has been requested), DHEC will notify all other signatories in writing as soon as possible.

DHEC will provide support to areas throughout the planning and implementation process by:

1. Developing emission inventories, modeling, trend analysis, and quantification and comparison of control measures.
2. Providing necessary information on all federal and state adopted emission reduction measures, which affect the area.
3. Providing technical and strategic assistance, as appropriate, in the selection and implementation of control strategies.
4. Providing technical and planning assistance in developing and implementing processes to address the impact of emissions growth beyond the attainment date.
5. Maintaining monitors and reporting and analysis of monitoring data.
6. Promoting public awareness efforts.
7. Coordinating communication between local areas and the EPA to facilitate continuing the EPA review of local work.
8. Ensuring expeditious review of local early action plan(s), and if deemed adequate, proposing modification of the early action SIP to adopt the early action plan.

9. Adopting control measures into the early action SIP as expeditiously as possible. The final complete early action SIP revision must be completed, adopted, and submitted by the state to the EPA by December 31, 2004.
10. Tracking progress. If any milestone is missed and EPA withdraws the deferred effective date, thereby triggering a non-attainment designation and applicable statutory requirements, the state will strive to submit a traditional non-attainment SIP within one year. However, due to the South Carolina legislative review process, it may take at least eighteen months.
11. Working concurrently with areas not electing to participate in the early action SIP process in preparing the traditional SIP submittal as required by the CAA.

## **V. The Environmental Protection Agency**

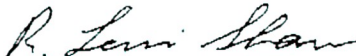
The EPA will participate by:

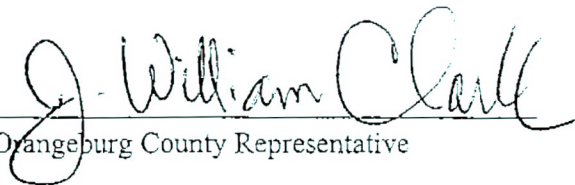
1. Recognizing the local area's and state's commitment to voluntarily adopt an early, substantive, enforceable, and scientifically-based attainment plan with early implementation of control measures by becoming a party to the EAC developed in conformance with South Carolina's Protocol for Early Action Compacts.
2. Providing technical assistance to the state(s) and local area(s) in the development of the early action plan.
3. Reviewing and approving the completed early action SIP by no later than September 30, 2005.
4. Deferring the effective date of non-attainment designation and related requirements for participating areas that fail to meet the 8-hour ozone standard as long as all terms and key milestones of the EAC are being met, including submission of the early action SIP revision by December 31, 2004.
5. Designating the area expeditiously as attainment and imposing no additional requirements, provided that the monitors in the area reflect attainment by December 31, 2007.
6. Taking action to withdraw the deferred effective date if the area violates the standard as of December 31, 2007, and the area has had the effective date of its non-attainment designation deferred. The area's non-attainment designation will become effective soon after.
7. Ensuring appropriate credit in the traditional SIP process for all emissions reductions from measures implemented in the early action SIP if the area does not meet all the terms of the EAC; including meeting agreed-upon key milestones and is designated (or re-designated if necessary) according to the EPA's 8-hour ozone implementation guidelines. The EPA will offer such an area no delays, exemptions, or other favorable treatment because of its participation in the EAC.

8. Not allowing any area to renew their EAC after December 31, 2007, or initiate a new compact if it has previously forfeited its participation.

**VI. Signatures**

  
United States Environmental Protection Agency      Regional Administrator      12-30-02  
Title      Date

  
South Carolina      Deputy Commissioner      12/20/02  
Department of Health and Environmental Control      Title      Date

  
Orangeburg County Representative      Interim  
County Administrator      12-17-2002  
Title      Date

## **Pee Dee Area**

## **Local Early Action Compacts**

**December 2002**



**SOUTH CAROLINA'S 8-HOUR OZONE  
EARLY ACTION COMPACT  
Chesterfield County**

The United States Environmental Protection Agency (EPA) has provided an option for areas currently meeting the 1-hour ozone standard, like those in South Carolina, to attain the 8-hour ozone standard by December 31, 2007, and obtain cleaner air sooner than federally mandated. This option offers a more expeditious time line for achieving emissions reductions than expected under the EPA's 8-hour ozone implementation rulemaking, while providing "fail-safe" provisions for the area to revert to the traditional State Implementation Plan (SIP) process if specific milestones are not met. Through the development of this Early Action Compact (EAC), local, state, and EPA officials agree to work together to develop and implement local and state early action plans. The plans will become a part of the state early action SIP to reduce ground-level ozone concentrations to comply with the 8-hour ozone standard by December 31, 2007, and maintain the standard beyond that date. Failure to meet the obligations outlined in this EAC will result in immediate reversion to the traditional non-attainment designation process as required in the Clean Air Act (CAA).

In an effort to provide this information to areas within South Carolina, the South Carolina Department of Health and Environmental Control (DHEC) held six public meetings throughout the state. The locations of the meetings were targeted to areas that could potentially be designated as non-attainment for the 8-hour ozone standard. The meetings were held in Columbia, Greenville, Florence, Rock Hill, Aiken and Charleston. EPA officials participated in five of the six meetings. The general public, local government representatives, industry representatives, and environmental interest groups attended the meetings. Prior to the meetings, DHEC issued a press release regarding the development of an early action SIP. Correspondence including a fact sheet was sent to all county administrators, Councils of Governments, Metropolitan Planning Organizations, public interest groups, industry representatives, other state agencies and others determined to be stakeholders in the process.

The Parties to this (EAC) are: Chesterfield County, South Carolina Department of Health and Environmental Control (DHEC) and EPA.

**I. General Provisions**

- A. The parties commit to develop, implement and maintain the early action SIP (which includes the local early action plans) providing EPA defers the effective date of the non-attainment designation and related requirements as long as all conditions of the EAC and key milestones are met.
- B. If the potential area of non-attainment does not meet all the terms of the EAC, then it will forfeit its participation and will be subject to the full planning requirements under applicable CAA

traditional SIP processes including requirements defined as part of the EPA's 8-hour ozone implementation rulemaking.

- C. If the area has had the effective date of a non-attainment designation deferred and the area does not reach attainment of the standard by December 31, 2007, then the non-attainment designation will be effective. If the EPA's implementation schedule also requires a traditional SIP from areas on or before December 31, 2007, then a traditional SIP revision demonstrating attainment by the new attainment date will be due for the non-attainment area no later than December 31, 2008.
- D. Before formal adoption into the early action SIP, this agreement may be modified or terminated by mutual consent of all parties, or any party may withdraw from the agreement by notifying other parties in writing. If a party's withdrawal from the agreement prevents remaining signatories from satisfying any of the terms and milestones of the original agreement, the agreement will be void, any deferred effective date of the non-attainment designation would be withdrawn and the area's non-attainment designation would become effective soon after. Upon termination or withdrawal from the EAC, the area will be subject to the full planning requirements under applicable CAA traditional processes including requirements defined as part of the EPA's 8-hour ozone implementation rulemaking. The local government signatories will approve the local early action plans before submittal to DHEC for inclusion in the early action SIP. Once the local early action plan is incorporated into the early action SIP, any modifications will be treated as SIP revisions.
- E. Execution of this EAC by each Party shall be by signature of each Party's authorized representative. This agreement remains in effect until December 31, 2007.

## II. **Early Action Compact Requirements**

- A. **Milestones and Reporting**  
DHEC and local areas will assess progress towards developing and implementing the early action SIP and make a report available to EPA and the public every six months beginning in June 2003. As per EPA guidance, the key milestones for participation in the EAC are identified in the following table.

<b>Local Plan /Early Action SIP Milestones</b>		
<b>DATE</b>	<b>MILESTONE</b>	<b>RESPONSIBILITY</b>
<b>December 31, 2002</b>	EAC signed by all parties and submitted to EPA	Local/State/EPA
<b>June 16, 2003</b>	Discussion of control measures being considered to EPA	Local/State
<b>March 31, 2004</b>	Final local early action plan submitted to DHEC; copy to EPA	Local
<b>December 31, 2004</b>	Early Action State Implementation Plan submitted to EPA for incorporation into SIP	State
<b>April 1, 2005</b>	Local/State control strategies implemented no later than this date	Local/State
<b>September 30, 2005</b>	EPA takes final action on SIP submitted December 31, 2004	EPA
<b>June 30, 2006</b>	State submits progress report to EPA	State
<b>December 31, 2007</b>	Attainment of the 8-hour ozone standard	Local/State

B. Emissions Inventories

1. DHEC will be responsible for developing emissions inventories.
2. An initial modeling emissions inventory will be completed by December 31, 2002. This inventory includes:
  - a. Emissions modeling data for a 1998 episode that is representative of a typical ozone season exceedance that meets the EPA episode selection guidance;
  - b. MOBILE6 for determining on-road mobile emissions;
  - c. NONROAD model data; and,
  - d. Area source database utilizing population data allocated statewide.
3. A 2007 future year modeling emissions inventory will be developed by March 31, 2004. This inventory will sufficiently account for projected future growth in ozone precursor emissions through 2007, particularly from stationary, non-road and on-road mobile sources.
4. Additional inventories will be contingent upon legislative appropriations or other funding. Selection of specific episode inventories will be partially determined by the conceptual model, which reflects an analysis of meteorological conditions typical of high ozone events.
5. Emissions inventories will be compared and analyzed for trends in emission sources over time. The emissions inventory comparison and analysis will be completed by December 31, 2003.

C. Modeling

1. DHEC will be responsible for conducting the meteorological and air quality modeling analysis. DHEC will conduct the modeling analysis based on the "Draft Guidance on the use of Models and Other Analyses in Attainment Demonstrations for the 8-Hour Ozone NAAQS" (EPA-454/R-99-004, May 1999). The modeling will follow the guidance as facilitated by the EPA Regional Office.
2. Base case modeling will be completed by December 31, 2002. Future case modeling will be completed by October 31, 2003. One or more modeled control cases will be completed by January 31, 2004, with final revisions completed by March 31, 2004. All modeling will:
  - be SIP quality and perform within EPA's accepted margin of accuracy;
  - be carefully documented;
  - sufficiently account for projected future growth in ozone precursor emissions;
  - be accomplished by DHEC and reviewed by EPA; and,
  - be used to determine the effectiveness of NO<sub>x</sub> and/or VOC reductions. The control case(s) will be used to determine the relative effectiveness of different emission reduction strategies and to aid in the selection of appropriate emission reduction strategies.

D. Control Strategies

1. All adopted Federal and State control strategies that have been or will be implemented by the December 31, 2007, attainment date will be included in base, future and control case modeling.
2. Additional local and state control strategies under consideration will be identified by June 16, 2003. The local and state control strategies selected will be implemented as soon as practical, but no later than April 1, 2005.
3. Local and state control strategies will be specific, quantified, permanent and enforceable. The strategies will also include specific implementation dates and detailed documentation and reporting processes.
4. Voluntary strategies can play a supporting role in the local early action plan and the early action SIP. If emission reductions from voluntary strategies are quantified and credit is taken for them in the local early action plan or the early action SIP, those emission reductions will be enforceable. Additional strategies must be implemented to meet those quantified reduction requirements if quantified voluntary strategies fail. This is true for all quantified emission reductions.
5. Local and state control strategies will be designed and implemented with full stakeholder participation.

6. Local and state control strategies will be incorporated by DHEC into the early action SIP. In the event that the local area desires to add, delete or substitute strategies after early action SIP submittal, the local area will request a modification. Local early action plan modifications will be treated as SIP revisions and facilitated by DHEC.

E. Maintenance for Growth

1. The early action SIP will include a component to address emissions growth at least five years beyond December 31, 2007, ensuring that the areas will remain in attainment of the 8-hour ozone standard during that period. Attainment maintenance analysis will be completed by January 31, 2004, with final revisions completed by March 31, 2004. The analysis will employ one or more of the following or any other appropriate techniques necessary to make such a demonstration:
  - a. Modeling analysis showing ozone levels below the 8-hour ozone standard in 2012;
  - b. An annual review of growth (especially mobile and stationary source) to ensure control measures and growth assumptions are adequate;
  - c. Identification and quantification of federal, state, and/or local measures indicating sufficient reductions to offset growth estimates; or,
  - d. Any other appropriate techniques necessary to make such a determination.
2. The early action SIP must also detail a continuing planning process that includes modeling updates and modeling assumption verification (particularly growth assumptions). Modeling updates and planning processes must consider and evaluate the following:
  - a. All relevant actual new point sources;
  - b. Impacts from potential new source growth; and,
  - c. Future transportation patterns and their impact on air quality in a manner that is consistent with the most current adopted Long Range Transportation Plan and most current trend and projections of local motor vehicle emissions.
3. If the review of emissions growth in conjunction with the continuing planning process demonstrates that adopted emission reduction strategies are inadequate to address growth in emissions, additional measures will be added to the early action plan. Local planning processes should prepare for this possibility.
4. In the event that the continuing planning process identifies the need to add, delete, or substitute control strategies after the local early action plan has been incorporated into the early action SIP, the local area will initiate, and DHEC will facilitate a SIP revision to accommodate changes.

**F. Public Involvement**

1. Public involvement has been and will continue to be strongly encouraged during the planning and implementation process.
2. Public awareness programs will be used to provide opportunities for involvement in the planning process, implementation of control strategies, and any other issues important to the area.
3. Interested stakeholders (i.e., local, state, and federal government, citizens, public interest groups, and the business community) will continue to be involved in the planning process as early as possible. Planning meetings will be open to the public, with posted meeting times and locations. Early action SIP drafts will be publicly available, and the drafting process will have sufficient opportunities for comment from all interested stakeholders.
4. Opportunities for public comment on the proposed early action SIP will be provided and will follow the traditional SIP revision process as implemented by DHEC.
5. Semi-annual reports detailing, at a minimum, progress toward key milestones, will be made available to the public.
6. DHEC has established and will maintain a website for South Carolina's Early Action Plan for the 8-hour ozone standard, located at [www.scdhec.net/baq/eap.html](http://www.scdhec.net/baq/eap.html).

**III. Local Government Responsibilities**

The local governments agree to develop and implement a local early action plan that will promote the area's attainment by December 31, 2007, of the 8-hour ozone standard and maintenance until at least 2012. The local governments will develop this plan in coordination with the DHEC, EPA, stakeholders and the public. The local early action plan will include a process to evaluate the effectiveness and maintain long-term compliance with the standard.

After all adopted Federal and State controls that have been or will be implemented by the attainment date of December 31, 2007, are accounted for in the modeling, the local area must adopt additional local controls, as necessary to demonstrate attainment of the 8-hour ozone standard by December 31, 2007. Local controls under consideration must be identified and described by June 16, 2003. These measures must be included in the semi-annual report made available to the public.

The draft local early action plan will be submitted to DHEC by August 31, 2003. The final local early action plan will be submitted to DHEC, with a copy forwarded to EPA, by March 31, 2004. The adopted local early action plan will be included in the early action SIP due December 31, 2004.

In the event a development or issue arises that may impact performance or progress toward key milestones (including if a key milestone will be or has been missed and/or if a termination or modification has been requested), the responsible party will notify all other signatories in writing as soon as possible.

#### **IV. The South Carolina Department of Health and Environmental Control**

DHEC agrees to develop and implement a state early action SIP that will demonstrate the participating area's attainment by December 31, 2007, of the 8-hour ozone standard and maintenance until at least 2012. DHEC will develop this plan in coordination with the local governments, EPA, stakeholders and the public. The state early action SIP will include a process to monitor and maintain long-term compliance with the standard.

It is the responsibility of each state under the CAA to ensure attainment with all National Ambient Air Quality Standards. At any such time that an area is deemed non-attainment, the state will be required to develop a plan to return the area(s) to attainment in accordance with the CAA. If applicable, South Carolina is committed to working with adjacent states to assure mutual attainment of national standards.

In the event a development or issue arises that may impact performance or progress toward key milestones (including if a key milestone will be or has been missed and/or if a termination or modification has been requested), DHEC will notify all other signatories in writing as soon as possible.

DHEC will provide support to areas throughout the planning and implementation process by:

1. Developing emission inventories, modeling, trend analysis, and quantification and comparison of control measures.
2. Providing necessary information on all federal and state adopted emission reduction measures, which affect the area.
3. Providing technical and strategic assistance, as appropriate, in the selection and implementation of control strategies.
4. Providing technical and planning assistance in developing and implementing processes to address the impact of emissions growth beyond the attainment date.
5. Maintaining monitors and reporting and analysis of monitoring data.
6. Promoting public awareness efforts.
7. Coordinating communication between local areas and the EPA to facilitate continuing the EPA review of local work.
8. Ensuring expeditious review of local early action plan(s), and if deemed adequate, proposing modification of the early action SIP to adopt the early action plan.

9. Adopting control measures into the early action SIP as expeditiously as possible. The final complete early action SIP revision must be completed, adopted, and submitted by the state to the EPA by December 31, 2004.
10. Tracking progress. If any milestone is missed and EPA withdraws the deferred effective date, thereby triggering a non-attainment designation and applicable statutory requirements, the state will strive to submit a traditional non-attainment SIP within one year. However, due to the South Carolina legislative review process, it may take at least eighteen months.
11. Working concurrently with areas not electing to participate in the early action SIP process in preparing the traditional SIP submittal as required by the CAA.

## **V. The Environmental Protection Agency**

The EPA will participate by:

1. Recognizing the local area's and state's commitment to voluntarily adopt an early, substantive, enforceable, and scientifically-based attainment plan with early implementation of control measures by becoming a party to the EAC developed in conformance with South Carolina's Protocol for Early Action Compacts.
2. Providing technical assistance to the state(s) and local area(s) in the development of the early action plan.
3. Reviewing and approving the completed early action SIP by no later than September 30, 2005.
4. Deferring the effective date of non-attainment designation and related requirements for participating areas that fail to meet the 8-hour ozone standard as long as all terms and key milestones of the EAC are being met, including submission of the early action SIP revision by December 31, 2004.
5. Designating the area expeditiously as attainment and imposing no additional requirements, provided that the monitors in the area reflect attainment by December 31, 2007.
6. Taking action to withdraw the deferred effective date if the area violates the standard as of December 31, 2007, and the area has had the effective date of its non-attainment designation deferred. The area's non-attainment designation will become effective soon after.
7. Ensuring appropriate credit in the traditional SIP process for all emissions reductions from measures implemented in the early action SIP if the area does not meet all the terms of the EAC; including meeting agreed-upon key milestones and is designated (or re-designated if necessary) according to the EPA's 8-hour ozone implementation guidelines. The EPA will offer such an area no delays, exemptions, or other favorable treatment because of its participation in the EAC.

8. Not allowing any area to renew their EAC after December 31, 2007, or initiate a new compact if it has previously forfeited its participation.

VI. Signatures

  
United States Environmental Protection Agency

Regional Administrator 12-30-02  
Title Date

R. Linnihan  
South Carolina  
Department of Health and Environmental Control

Deputy Commissioner 12/20/02  
Title Date

Wm. Cross, Jr.  
Chesterfield County Representative

Chairman 12-4-02  
Title Date

**SOUTH CAROLINA'S 8-HOUR OZONE  
EARLY ACTION COMPACT  
Darlington County**

The United States Environmental Protection Agency (EPA) has provided an option for areas currently meeting the 1-hour ozone standard, like those in South Carolina, to attain the 8-hour ozone standard by December 31, 2007, and obtain cleaner air sooner than federally mandated. This option offers a more expeditious time line for achieving emissions reductions than expected under the EPA's 8-hour ozone implementation rulemaking, while providing "fail-safe" provisions for the area to revert to the traditional State Implementation Plan (SIP) process if specific milestones are not met. Through the development of this Early Action Compact (EAC), local, state, and EPA officials agree to work together to develop and implement local and state early action plans. The plans will become a part of the state early action SIP to reduce ground-level ozone concentrations to comply with the 8-hour ozone standard by December 31, 2007, and maintain the standard beyond that date. Failure to meet the obligations outlined in this EAC will result in immediate reversion to the traditional non-attainment designation process as required in the Clean Air Act (CAA).

In an effort to provide this information to areas within South Carolina, the South Carolina Department of Health and Environmental Control (DHEC) held six public meetings throughout the state. The locations of the meetings were targeted to areas that could potentially be designated as non-attainment for the 8-hour ozone standard. The meetings were held in Columbia, Greenville, Florence, Rock Hill, Aiken and Charleston. EPA officials participated in five of the six meetings. The general public, local government representatives, industry representatives, and environmental interest groups attended the meetings. Prior to the meetings, DHEC issued a press release regarding the development of an early action SIP. Correspondence including a fact sheet was sent to all county administrators, Councils of Governments, Metropolitan Planning Organizations, public interest groups, industry representatives, other state agencies and others determined to be stakeholders in the process.

The Parties to this (EAC) are: Darlington County, South Carolina Department of Health and Environmental Control (DHEC) and EPA.

**I. General Provisions**

- A. The parties commit to develop, implement and maintain the early action SIP (which includes the local early action plans) providing EPA defers the effective date of the non-attainment designation and related requirements as long as all conditions of the EAC and key milestones are met.
- B. If the potential area of non-attainment does not meet all the terms of the EAC, then it will forfeit its participation and will be subject to the full planning requirements under applicable CAA

traditional SIP processes including requirements defined as part of the EPA's 8-hour ozone implementation rulemaking.

- C. If the area has had the effective date of a non-attainment designation deferred and the area does not reach attainment of the standard by December 31, 2007, then the non-attainment designation will be effective. If the EPA's implementation schedule also requires a traditional SIP from areas on or before December 31, 2007, then a traditional SIP revision demonstrating attainment by the new attainment date will be due for the non-attainment area no later than December 31, 2008.
- D. Before formal adoption into the early action SIP, this agreement may be modified or terminated by mutual consent of all parties, or any party may withdraw from the agreement by notifying other parties in writing. If a party's withdrawal from the agreement prevents remaining signatories from satisfying any of the terms and milestones of the original agreement, the agreement will be void, any deferred effective date of the non-attainment designation would be withdrawn and the area's non-attainment designation would become effective soon after. Upon termination or withdrawal from the EAC, the area will be subject to the full planning requirements under applicable CAA traditional processes including requirements defined as part of the EPA's 8-hour ozone implementation rulemaking. The local government signatories will approve the local early action plans before submittal to DHEC for inclusion in the early action SIP. Once the local early action plan is incorporated into the early action SIP, any modifications will be treated as SIP revisions.
- E. Execution of this EAC by each Party shall be by signature of each Party's authorized representative. This agreement remains in effect until December 31, 2007.

## II. **Early Action Compact Requirements**

- A. **Milestones and Reporting**  
DHEC and local areas will assess progress towards developing and implementing the early action SIP and make a report available to EPA and the public every six months beginning in June 2003. As per EPA guidance, the key milestones for participation in the EAC are identified in the following table.

<b>Local Plan /Early Action SIP Milestones</b>		
<b>DATE</b>	<b>MILESTONE</b>	<b>RESPONSIBILITY</b>
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<b>March 31, 2004</b>	Final local early action plan submitted to DHEC; copy to EPA	Local
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<b>September 30, 2005</b>	EPA takes final action on SIP submitted December 31, 2004	EPA
<b>June 30, 2006</b>	State submits progress report to EPA	State
<b>December 31, 2007</b>	Attainment of the 8-hour ozone standard	Local/State

B. Emissions Inventories

1. DHEC will be responsible for developing emissions inventories.
2. An initial modeling emissions inventory will be completed by December 31, 2002. This inventory includes:
  - a. Emissions modeling data for a 1998 episode that is representative of a typical ozone season exceedance that meets the EPA episode selection guidance;
  - b. MOBILE6 for determining on-road mobile emissions;
  - c. NONROAD model data; and,
  - d. Area source database utilizing population data allocated statewide.
3. A 2007 future year modeling emissions inventory will be developed by March 31, 2004. This inventory will sufficiently account for projected future growth in ozone precursor emissions through 2007, particularly from stationary, non-road and on-road mobile sources.
4. Additional inventories will be contingent upon legislative appropriations or other funding. Selection of specific episode inventories will be partially determined by the conceptual model, which reflects an analysis of meteorological conditions typical of high ozone events.
5. Emissions inventories will be compared and analyzed for trends in emission sources over time. The emissions inventory comparison and analysis will be completed by December 31, 2003.

C. Modeling

1. DHEC will be responsible for conducting the meteorological and air quality modeling analysis. DHEC will conduct the modeling analysis based on the "Draft Guidance on the use of Models and Other Analyses in Attainment Demonstrations for the 8-Hour Ozone NAAQS" (EPA-454/R-99-004, May 1999). The modeling will follow the guidance as facilitated by the EPA Regional Office.
2. Base case modeling will be completed by December 31, 2002. Future case modeling will be completed by October 31, 2003. One or more modeled control cases will be completed by January 31, 2004, with final revisions completed by March 31, 2004. All modeling will:
  - be SIP quality and perform within EPA's accepted margin of accuracy;
  - be carefully documented;
  - sufficiently account for projected future growth in ozone precursor emissions;
  - be accomplished by DHEC and reviewed by EPA; and,
  - be used to determine the effectiveness of NO<sub>x</sub> and/or VOC reductions. The control case(s) will be used to determine the relative effectiveness of different emission reduction strategies and to aid in the selection of appropriate emission reduction strategies.

D. Control Strategies

1. All adopted Federal and State control strategies that have been or will be implemented by the December 31, 2007, attainment date will be included in base, future and control case modeling.
2. Additional local and state control strategies under consideration will be identified by June 16, 2003. The local and state control strategies selected will be implemented as soon as practical, but no later than April 1, 2005.
3. Local and state control strategies will be specific, quantified, permanent and enforceable. The strategies will also include specific implementation dates and detailed documentation and reporting processes.
4. Voluntary strategies can play a supporting role in the local early action plan and the early action SIP. If emission reductions from voluntary strategies are quantified and credit is taken for them in the local early action plan or the early action SIP, those emission reductions will be enforceable. Additional strategies must be implemented to meet those quantified reduction requirements if quantified voluntary strategies fail. This is true for all quantified emission reductions.
5. Local and state control strategies will be designed and implemented with full stakeholder participation.

6. Local and state control strategies will be incorporated by DHEC into the early action SIP. In the event that the local area desires to add, delete or substitute strategies after early action SIP submittal, the local area will request a modification. Local early action plan modifications will be treated as SIP revisions and facilitated by DHEC.

E. Maintenance for Growth

1. The early action SIP will include a component to address emissions growth at least five years beyond December 31, 2007, ensuring that the areas will remain in attainment of the 8-hour ozone standard during that period. Attainment maintenance analysis will be completed by January 31, 2004, with final revisions completed by March 31, 2004. The analysis will employ one or more of the following or any other appropriate techniques necessary to make such a demonstration:
  - a. Modeling analysis showing ozone levels below the 8-hour ozone standard in 2012;
  - b. An annual review of growth (especially mobile and stationary source) to ensure control measures and growth assumptions are adequate;
  - c. Identification and quantification of federal, state, and/or local measures indicating sufficient reductions to offset growth estimates; or,
  - d. Any other appropriate techniques necessary to make such a determination.
2. The early action SIP must also detail a continuing planning process that includes modeling updates and modeling assumption verification (particularly growth assumptions). Modeling updates and planning processes must consider and evaluate the following:
  - a. All relevant actual new point sources;
  - b. Impacts from potential new source growth; and,
  - c. Future transportation patterns and their impact on air quality in a manner that is consistent with the most current adopted Long Range Transportation Plan and most current trend and projections of local motor vehicle emissions.
3. If the review of emissions growth in conjunction with the continuing planning process demonstrates that adopted emission reduction strategies are inadequate to address growth in emissions, additional measures will be added to the early action plan. Local planning processes should prepare for this possibility.
4. In the event that the continuing planning process identifies the need to add, delete, or substitute control strategies after the local early action plan has been incorporated into the early action SIP, the local area will initiate, and DHEC will facilitate a SIP revision to accommodate changes.

**F. Public Involvement**

1. Public involvement has been and will continue to be strongly encouraged during the planning and implementation process.
2. Public awareness programs will be used to provide opportunities for involvement in the planning process, implementation of control strategies, and any other issues important to the area.
3. Interested stakeholders (i.e., local, state, and federal government, citizens, public interest groups, and the business community) will continue to be involved in the planning process as early as possible. Planning meetings will be open to the public, with posted meeting times and locations. Early action SIP drafts will be publicly available, and the drafting process will have sufficient opportunities for comment from all interested stakeholders.
4. Opportunities for public comment on the proposed early action SIP will be provided and will follow the traditional SIP revision process as implemented by DHEC.
5. Semi-annual reports detailing, at a minimum, progress toward key milestones, will be made available to the public.
6. DHEC has established and will maintain a website for South Carolina's Early Action Plan for the 8-hour ozone standard, located at [www.scdhec.net/baq/eap.html](http://www.scdhec.net/baq/eap.html).

**III. Local Government Responsibilities**

The local governments agree to develop and implement a local early action plan that will promote the area's attainment by December 31, 2007, of the 8-hour ozone standard and maintenance until at least 2012. The local governments will develop this plan in coordination with the DHEC, EPA, stakeholders and the public. The local early action plan will include a process to evaluate the effectiveness and maintain long-term compliance with the standard.

After all adopted Federal and State controls that have been or will be implemented by the attainment date of December 31, 2007, are accounted for in the modeling, the local area must adopt additional local controls, as necessary to demonstrate attainment of the 8-hour ozone standard by December 31, 2007. Local controls under consideration must be identified and described by June 16, 2003. These measures must be included in the semi-annual report made available to the public.

The draft local early action plan will be submitted to DHEC by August 31, 2003. The final local early action plan will be submitted to DHEC, with a copy forwarded to EPA, by March 31, 2004. The adopted local early action plan will be included in the early action SIP due December 31, 2004.

In the event a development or issue arises that may impact performance or progress toward key milestones (including if a key milestone will be or has been missed and/or if a termination or modification has been requested), the responsible party will notify all other signatories in writing as soon as possible.

#### **IV. The South Carolina Department of Health and Environmental Control**

DHEC agrees to develop and implement a state early action SIP that will demonstrate the participating area's attainment by December 31, 2007, of the 8-hour ozone standard and maintenance until at least 2012. DHEC will develop this plan in coordination with the local governments, EPA, stakeholders and the public. The state early action SIP will include a process to monitor and maintain long-term compliance with the standard.

It is the responsibility of each state under the CAA to ensure attainment with all National Ambient Air Quality Standards. At any such time that an area is deemed non-attainment, the state will be required to develop a plan to return the area(s) to attainment in accordance with the CAA. If applicable, South Carolina is committed to working with adjacent states to assure mutual attainment of national standards.

In the event a development or issue arises that may impact performance or progress toward key milestones (including if a key milestone will be or has been missed and/or if a termination or modification has been requested), DHEC will notify all other signatories in writing as soon as possible.

DHEC will provide support to areas throughout the planning and implementation process by:

1. Developing emission inventories, modeling, trend analysis, and quantification and comparison of control measures.
2. Providing necessary information on all federal and state adopted emission reduction measures, which affect the area.
3. Providing technical and strategic assistance, as appropriate, in the selection and implementation of control strategies.
4. Providing technical and planning assistance in developing and implementing processes to address the impact of emissions growth beyond the attainment date.
5. Maintaining monitors and reporting and analysis of monitoring data.
6. Promoting public awareness efforts.
7. Coordinating communication between local areas and the EPA to facilitate continuing the EPA review of local work.
8. Ensuring expeditious review of local early action plan(s), and if deemed adequate, proposing modification of the early action SIP to adopt the early action plan.

9. Adopting control measures into the early action SIP as expeditiously as possible. The final complete early action SIP revision must be completed, adopted, and submitted by the state to the EPA by December 31, 2004.
10. Tracking progress. If any milestone is missed and EPA withdraws the deferred effective date, thereby triggering a non-attainment designation and applicable statutory requirements, the state will strive to submit a traditional non-attainment SIP within one year. However, due to the South Carolina legislative review process, it may take at least eighteen months.
11. Working concurrently with areas not electing to participate in the early action SIP process in preparing the traditional SIP submittal as required by the CAA.

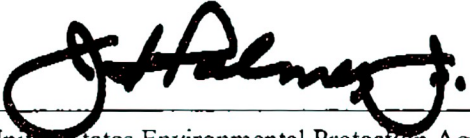
## **V. The Environmental Protection Agency**

The EPA will participate by:

1. Recognizing the local area's and state's commitment to voluntarily adopt an early, substantive, enforceable, and scientifically-based attainment plan with early implementation of control measures by becoming a party to the EAC developed in conformance with South Carolina's Protocol for Early Action Compacts.
2. Providing technical assistance to the state(s) and local area(s) in the development of the early action plan.
3. Reviewing and approving the completed early action SIP by no later than September 30, 2005.
4. Deferring the effective date of non-attainment designation and related requirements for participating areas that fail to meet the 8-hour ozone standard as long as all terms and key milestones of the EAC are being met, including submission of the early action SIP revision by December 31, 2004.
5. Designating the area expeditiously as attainment and imposing no additional requirements, provided that the monitors in the area reflect attainment by December 31, 2007.
6. Taking action to withdraw the deferred effective date if the area violates the standard as of December 31, 2007, and the area has had the effective date of its non-attainment designation deferred. The area's non-attainment designation will become effective soon after.
7. Ensuring appropriate credit in the traditional SIP process for all emissions reductions from measures implemented in the early action SIP if the area does not meet all the terms of the EAC; including meeting agreed-upon key milestones and is designated (or re-designated if necessary) according to the EPA's 8-hour ozone implementation guidelines. The EPA will offer such an area no delays, exemptions, or other favorable treatment because of its participation in the EAC.

8. Not allowing any area to renew their EAC after December 31, 2007, or initiate a new compact if it has previously forfeited its participation.

VI. Signatures

  
United States Environmental Protection Agency

Regional Administrator 12-30-02  
Title Date

R. Linn Shan  
South Carolina  
Department of Health and Environmental Control

Deputy Commissioner 12/20/02  
Title Date

Russell Walker  
Darlington County Representative

Vice Chairman 12/16/02  
Title Date

**SOUTH CAROLINA'S 8-HOUR OZONE  
EARLY ACTION COMPACT**  
Dillon County

The United States Environmental Protection Agency (EPA) has provided an option for areas currently meeting the 1-hour ozone standard, like those in South Carolina, to attain the 8-hour ozone standard by December 31, 2007, and obtain cleaner air sooner than federally mandated. This option offers a more expeditious time line for achieving emissions reductions than expected under the EPA's 8-hour ozone implementation rulemaking, while providing "fail-safe" provisions for the area to revert to the traditional State Implementation Plan (SIP) process if specific milestones are not met. Through the development of this Early Action Compact (EAC), local, state, and EPA officials agree to work together to develop and implement local and state early action plans. The plans will become a part of the state early action SIP to reduce ground-level ozone concentrations to comply with the 8-hour ozone standard by December 31, 2007, and maintain the standard beyond that date. Failure to meet the obligations outlined in this EAC will result in immediate reversion to the traditional non-attainment designation process as required in the Clean Air Act (CAA).

In an effort to provide this information to areas within South Carolina, the South Carolina Department of Health and Environmental Control (DHEC) held six public meetings throughout the state. The locations of the meetings were targeted to areas that could potentially be designated as non-attainment for the 8-hour ozone standard. The meetings were held in Columbia, Greenville, Florence, Rock Hill, Aiken and Charleston. EPA officials participated in five of the six meetings. The general public, local government representatives, industry representatives, and environmental interest groups attended the meetings. Prior to the meetings, DHEC issued a press release regarding the development of an early action SIP. Correspondence including a fact sheet was sent to all county administrators, Councils of Governments, Metropolitan Planning Organizations, public interest groups, industry representatives, other state agencies and others determined to be stakeholders in the process.

The Parties to this EAC are: Dillon County, South Carolina Department of Health and Environmental Control (DHEC) and EPA.

**I. General Provisions**

- A. The parties commit to develop, implement and maintain the early action SIP (which includes the local early action plans) providing EPA defers the effective date of the non-attainment designation and related requirements as long as all conditions of the EAC and key milestones are met.
- B. If the potential area of non-attainment does not meet all the terms of the EAC, then it will forfeit its participation and will be subject to the full planning requirements under applicable CAA

traditional SIP processes including requirements defined as part of the EPA's 8-hour ozone implementation rulemaking.

- C. If the area has had the effective date of a non-attainment designation deferred and the area does not reach attainment of the standard by December 31, 2007, then the non-attainment designation will be effective. If the EPA's implementation schedule also requires a traditional SIP from areas on or before December 31, 2007, then a traditional SIP revision demonstrating attainment by the new attainment date will be due for the non-attainment area no later than December 31, 2008.
- D. Before formal adoption into the early action SIP, this agreement may be modified or terminated by mutual consent of all parties, or any party may withdraw from the agreement by notifying other parties in writing. If a party's withdrawal from the agreement prevents remaining signatories from satisfying any of the terms and milestones of the original agreement, the agreement will be void, any deferred effective date of the non-attainment designation would be withdrawn and the area's non-attainment designation would become effective soon after. Upon termination or withdrawal from the EAC, the area will be subject to the full planning requirements under applicable CAA traditional processes including requirements defined as part of the EPA's 8-hour ozone implementation rulemaking. The local government signatories will approve the local early action plans before submittal to DHEC for inclusion in the early action SIP. Once the local early action plan is incorporated into the early action SIP, any modifications will be treated as SIP revisions.
- E. Execution of this EAC by each Party shall be by signature of each Party's authorized representative. This agreement remains in effect until December 31, 2007.

## **II. Early Action Compact Requirements**

- A. **Milestones and Reporting**  
DHEC and local areas will assess progress towards developing and implementing the early action SIP and make a report available to EPA and the public every six months beginning in June 2003. As per EPA guidance, the key milestones for participation in the EAC are identified in the following table.

<b>Local Plan /Early Action SIP Milestones</b>		
<b>DATE</b>	<b>MILESTONE</b>	<b>RESPONSIBILITY</b>
<b>December 31, 2002</b>	EAC signed by all parties and submitted to EPA	Local/State/EPA
<b>June 16, 2003</b>	Discussion of control measures being considered to EPA	Local/State
<b>March 31, 2004</b>	Final local early action plan submitted to DHEC; copy to EPA	Local
<b>December 31, 2004</b>	Early Action State Implementation Plan submitted to EPA for incorporation into SIP	State
<b>April 1, 2005</b>	Local/State control strategies implemented no later than this date	Local/State
<b>September 30, 2005</b>	EPA takes final action on SIP submitted December 31, 2004	EPA
<b>June 30, 2006</b>	State submits progress report to EPA	State
<b>December 31, 2007</b>	Attainment of the 8-hour ozone standard	Local/State

B. Emissions Inventories

1. DHEC will be responsible for developing emissions inventories.
2. An initial modeling emissions inventory will be completed by December 31, 2002. This inventory includes:
  - a. Emissions modeling data for a 1998 episode that is representative of a typical ozone season exceedance that meets the EPA episode selection guidance;
  - b. MOBILE6 for determining on-road mobile emissions;
  - c. NONROAD model data; and,
  - d. Area source database utilizing population data allocated statewide.
3. A 2007 future year modeling emissions inventory will be developed by March 31, 2004. This inventory will sufficiently account for projected future growth in ozone precursor emissions through 2007, particularly from stationary, non-road and on-road mobile sources.
4. Additional inventories will be contingent upon legislative appropriations or other funding. Selection of specific episode inventories will be partially determined by the conceptual model, which reflects an analysis of meteorological conditions typical of high ozone events.
5. Emissions inventories will be compared and analyzed for trends in emission sources over time. The emissions inventory comparison and analysis will be completed by December 31, 2003.

C. Modeling

1. DHEC will be responsible for conducting the meteorological and air quality modeling analysis. DHEC will conduct the modeling analysis based on the "Draft Guidance on the use of Models and Other Analyses in Attainment Demonstrations for the 8-Hour Ozone NAAQS" (EPA-454/R-99-004, May 1999). The modeling will follow the guidance as facilitated by the EPA Regional Office.
2. Base case modeling will be completed by December 31, 2002. Future case modeling will be completed by October 31, 2003. One or more modeled control cases will be completed by January 31, 2004, with final revisions completed by March 31, 2004. All modeling will:
  - be SIP quality and perform within EPA's accepted margin of accuracy;
  - be carefully documented;
  - sufficiently account for projected future growth in ozone precursor emissions;
  - be accomplished by DHEC and reviewed by EPA; and,
  - be used to determine the effectiveness of NO<sub>x</sub> and/or VOC reductions. The control case(s) will be used to determine the relative effectiveness of different emission reduction strategies and to aid in the selection of appropriate emission reduction strategies.

D. Control Strategies

1. All adopted Federal and State control strategies that have been or will be implemented by the December 31, 2007, attainment date will be included in base, future and control case modeling.
2. Additional local and state control strategies under consideration will be identified by June 16, 2003. The local and state control strategies selected will be implemented as soon as practical, but no later than April 1, 2005.
3. Local and state control strategies will be specific, quantified, permanent and enforceable. The strategies will also include specific implementation dates and detailed documentation and reporting processes.
4. Voluntary strategies can play a supporting role in the local early action plan and the early action SIP. If emission reductions from voluntary strategies are quantified and credit is taken for them in the local early action plan or the early action SIP, those emission reductions will be enforceable. Additional strategies must be implemented to meet those quantified reduction requirements if quantified voluntary strategies fail. This is true for all quantified emission reductions.
5. Local and state control strategies will be designed and implemented with full stakeholder participation.

6. Local and state control strategies will be incorporated by DHEC into the early action SIP. In the event that the local area desires to add, delete or substitute strategies after early action SIP submittal, the local area will request a modification. Local early action plan modifications will be treated as SIP revisions and facilitated by DHEC.

E. Maintenance for Growth

1. The early action SIP will include a component to address emissions growth at least five years beyond December 31, 2007, ensuring that the areas will remain in attainment of the 8-hour ozone standard during that period. Attainment maintenance analysis will be completed by January 31, 2004, with final revisions completed by March 31, 2004. The analysis will employ one or more of the following or any other appropriate techniques necessary to make such a demonstration:
  - a. Modeling analysis showing ozone levels below the 8-hour ozone standard in 2012;
  - b. An annual review of growth (especially mobile and stationary source) to ensure control measures and growth assumptions are adequate;
  - c. Identification and quantification of federal, state, and/or local measures indicating sufficient reductions to offset growth estimates; or,
  - d. Any other appropriate techniques necessary to make such a determination.
2. The early action SIP must also detail a continuing planning process that includes modeling updates and modeling assumption verification (particularly growth assumptions). Modeling updates and planning processes must consider and evaluate the following:
  - a. All relevant actual new point sources;
  - b. Impacts from potential new source growth; and,
  - c. Future transportation patterns and their impact on air quality in a manner that is consistent with the most current adopted Long Range Transportation Plan and most current trend and projections of local motor vehicle emissions.
3. If the review of emissions growth in conjunction with the continuing planning process demonstrates that adopted emission reduction strategies are inadequate to address growth in emissions, additional measures will be added to the early action plan. Local planning processes should prepare for this possibility.
4. In the event that the continuing planning process identifies the need to add, delete, or substitute control strategies after the local early action plan has been incorporated into the early action SIP, the local area will initiate, and DHEC will facilitate a SIP revision to accommodate changes.

**F. Public Involvement**

1. Public involvement has been and will continue to be strongly encouraged during the planning and implementation process.
2. Public awareness programs will be used to provide opportunities for involvement in the planning process, implementation of control strategies, and any other issues important to the area.
3. Interested stakeholders (i.e., local, state, and federal government, citizens, public interest groups, and the business community) will continue to be involved in the planning process as early as possible. Planning meetings will be open to the public, with posted meeting times and locations. Early action SIP drafts will be publicly available, and the drafting process will have sufficient opportunities for comment from all interested stakeholders.
4. Opportunities for public comment on the proposed early action SIP will be provided and will follow the traditional SIP revision process as implemented by DHEC.
5. Semi-annual reports detailing, at a minimum, progress toward key milestones, will be made available to the public.
6. DHEC has established and will maintain a website for South Carolina's Early Action Plan for the 8-hour ozone standard, located at [www.scdhec.net/baq/eap.html](http://www.scdhec.net/baq/eap.html).

**III. Local Government Responsibilities**

The local governments agree to develop and implement a local early action plan that will promote the area's attainment by December 31, 2007, of the 8-hour ozone standard and maintenance until at least 2012. The local governments will develop this plan in coordination with the DHEC, EPA, stakeholders and the public. The local early action plan will include a process to evaluate the effectiveness and maintain long-term compliance with the standard.

After all adopted Federal and State controls that have been or will be implemented by the attainment date of December 31, 2007, are accounted for in the modeling, the local area must adopt additional local controls, as necessary to demonstrate attainment of the 8-hour ozone standard by December 31, 2007. Local controls under consideration must be identified and described by June 16, 2003. These measures must be included in the semi-annual report made available to the public.

The draft local early action plan will be submitted to DHEC by August 31, 2003. The final local early action plan will be submitted to DHEC, with a copy forwarded to EPA, by March 31, 2004. The adopted local early action plan will be included in the early action SIP due December 31, 2004.

In the event a development or issue arises that may impact performance or progress toward key milestones (including if a key milestone will be or has been missed and/or if a termination or modification has been requested), the responsible party will notify all other signatories in writing as soon as possible.

#### **IV. The South Carolina Department of Health and Environmental Control**

DHEC agrees to develop and implement a state early action SIP that will demonstrate the participating area's attainment by December 31, 2007, of the 8-hour ozone standard and maintenance until at least 2012. DHEC will develop this plan in coordination with the local governments, EPA, stakeholders and the public. The state early action SIP will include a process to monitor and maintain long-term compliance with the standard.

It is the responsibility of each state under the CAA to ensure attainment with all National Ambient Air Quality Standards. At any such time that an area is deemed non-attainment, the state will be required to develop a plan to return the area(s) to attainment in accordance with the CAA. If applicable, South Carolina is committed to working with adjacent states to assure mutual attainment of national standards.

In the event a development or issue arises that may impact performance or progress toward key milestones (including if a key milestone will be or has been missed and/or if a termination or modification has been requested), DHEC will notify all other signatories in writing as soon as possible.

DHEC will provide support to areas throughout the planning and implementation process by:

1. Developing emission inventories, modeling, trend analysis, and quantification and comparison of control measures.
2. Providing necessary information on all federal and state adopted emission reduction measures, which affect the area.
3. Providing technical and strategic assistance, as appropriate, in the selection and implementation of control strategies.
4. Providing technical and planning assistance in developing and implementing processes to address the impact of emissions growth beyond the attainment date.
5. Maintaining monitors and reporting and analysis of monitoring data.
6. Promoting public awareness efforts.
7. Coordinating communication between local areas and the EPA to facilitate continuing the EPA review of local work.
8. Ensuring expeditious review of local early action plan(s), and if deemed adequate, proposing modification of the early action SIP to adopt the early action plan.

9. Adopting control measures into the early action SIP as expeditiously as possible. The final complete early action SIP revision must be completed, adopted, and submitted by the state to the EPA by December 31, 2004.
10. Tracking progress. If any milestone is missed and EPA withdraws the deferred effective date, thereby triggering a non-attainment designation and applicable statutory requirements, the state will strive to submit a traditional non-attainment SIP within one year. However, due to the South Carolina legislative review process, it may take at least eighteen months.
11. Working concurrently with areas not electing to participate in the early action SIP process in preparing the traditional SIP submittal as required by the CAA.

## **V. The Environmental Protection Agency**

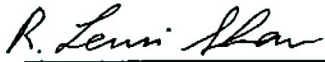
The EPA will participate by:

1. Recognizing the local area's and state's commitment to voluntarily adopt an early, substantive, enforceable, and scientifically-based attainment plan with early implementation of control measures by becoming a party to the EAC developed in conformance with South Carolina's Protocol for Early Action Compacts.
2. Providing technical assistance to the state(s) and local area(s) in the development of the early action plan.
3. Reviewing and approving the completed early action SIP by no later than September 30, 2005.
4. Deferring the effective date of non-attainment designation and related requirements for participating areas that fail to meet the 8-hour ozone standard as long as all terms and key milestones of the EAC are being met, including submission of the early action SIP revision by December 31, 2004.
5. Designating the area expeditiously as attainment and imposing no additional requirements, provided that the monitors in the area reflect attainment by December 31, 2007.
6. Taking action to withdraw the deferred effective date if the area violates the standard as of December 31, 2007, and the area has had the effective date of its non-attainment designation deferred. The area's non-attainment designation will become effective soon after.
7. Ensuring appropriate credit in the traditional SIP process for all emissions reductions from measures implemented in the early action SIP if the area does not meet all the terms of the EAC; including meeting agreed-upon key milestones and is designated (or re-designated if necessary) according to the EPA's 8-hour ozone implementation guidelines. The EPA will offer such an area no delays, exemptions, or other favorable treatment because of its participation in the EAC.

8. Not allowing any area to renew their EAC after December 31, 2007, or initiate a new compact if it has previously forfeited its participation.

VI. Signatures

  
United States Environmental Protection Agency      Regional Administrator      12-30-02  
Title      Date

  
South Carolina      Deputy Commissioner      12/20/02  
Department of Health and Environmental Control      Title      Date

  
Dillon County Representative      Administrator      12/18-02  
Title      Date

**SOUTH CAROLINA'S 8-HOUR OZONE  
EARLY ACTION COMPACT  
Florence County**

The United States Environmental Protection Agency (EPA) has provided an option for areas currently meeting the 1-hour ozone standard, like those in South Carolina, to attain the 8-hour ozone standard by December 31, 2007, and obtain cleaner air sooner than federally mandated. This option offers a more expeditious time line for achieving emissions reductions than expected under the EPA's 8-hour ozone implementation rulemaking, while providing "fail-safe" provisions for the area to revert to the traditional State Implementation Plan (SIP) process if specific milestones are not met. Through the development of this Early Action Compact (EAC), local, state, and EPA officials agree to work together to develop and implement local and state early action plans. The plans will become a part of the state early action SIP to reduce ground-level ozone concentrations to comply with the 8-hour ozone standard by December 31, 2007, and maintain the standard beyond that date. Failure to meet the obligations outlined in this EAC will result in immediate reversion to the traditional non-attainment designation process as required in the Clean Air Act (CAA).

In an effort to provide this information to areas within South Carolina, the South Carolina Department of Health and Environmental Control (DHEC) held six public meetings throughout the state. The locations of the meetings were targeted to areas that could potentially be designated as non-attainment for the 8-hour ozone standard. The meetings were held in Columbia, Greenville, Florence, Rock Hill, Aiken and Charleston. EPA officials participated in five of the six meetings. The general public, local government representatives, industry representatives, and environmental interest groups attended the meetings. Prior to the meetings, DHEC issued a press release regarding the development of an early action SIP. Correspondence including a fact sheet was sent to all county administrators, Councils of Governments, Metropolitan Planning Organizations, public interest groups, industry representatives, other state agencies and others determined to be stakeholders in the process.

The Parties to this (EAC) are: Florence County, South Carolina Department of Health and Environmental Control (DHEC) and EPA.

**I. General Provisions**

- A. The parties commit to develop, implement and maintain the early action SIP (which includes the local early action plans) providing EPA defers the effective date of the non-attainment designation and related requirements as long as all conditions of the EAC and key milestones are met.
- B. If the potential area of non-attainment does not meet all the terms of the EAC, then it will forfeit its participation and will be subject to the full planning requirements under applicable CAA

traditional SIP processes including requirements defined as part of the EPA's 8-hour ozone implementation rulemaking.

- C. If the area has had the effective date of a non-attainment designation deferred and the area does not reach attainment of the standard by December 31, 2007, then the non-attainment designation will be effective. If the EPA's implementation schedule also requires a traditional SIP from areas on or before December 31, 2007, then a traditional SIP revision demonstrating attainment by the new attainment date will be due for the non-attainment area no later than December 31, 2008.
- D. Before formal adoption into the early action SIP, this agreement may be modified or terminated by mutual consent of all parties, or any party may withdraw from the agreement by notifying other parties in writing. If a party's withdrawal from the agreement prevents remaining signatories from satisfying any of the terms and milestones of the original agreement, the agreement will be void, any deferred effective date of the non-attainment designation would be withdrawn and the area's non-attainment designation would become effective soon after. Upon termination or withdrawal from the EAC, the area will be subject to the full planning requirements under applicable CAA traditional processes including requirements defined as part of the EPA's 8-hour ozone implementation rulemaking. The local government signatories will approve the local early action plans before submittal to DHEC for inclusion in the early action SIP. Once the local early action plan is incorporated into the early action SIP, any modifications will be treated as SIP revisions.
- E. Execution of this EAC by each Party shall be by signature of each Party's authorized representative. This agreement remains in effect until December 31, 2007.

## II. **Early Action Compact Requirements**

- A. **Milestones and Reporting**  
DHEC and local areas will assess progress towards developing and implementing the early action SIP and make a report available to EPA and the public every six months beginning in June 2003. As per EPA guidance, the key milestones for participation in the EAC are identified in the following table.

<b>Local Plan /Early Action SIP Milestones</b>		
<b>DATE</b>	<b>MILESTONE</b>	<b>RESPONSIBILITY</b>
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<b>June 16, 2003</b>	Discussion of control measures being considered to EPA	Local/State
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<b>April 1, 2005</b>	Local/State control strategies implemented no later than this date	Local/State
<b>September 30, 2005</b>	EPA takes final action on SIP submitted December 31, 2004	EPA
<b>June 30, 2006</b>	State submits progress report to EPA	State
<b>December 31, 2007</b>	Attainment of the 8-hour ozone standard	Local/State

B. Emissions Inventories

1. DHEC will be responsible for developing emissions inventories.
2. An initial modeling emissions inventory will be completed by December 31, 2002. This inventory includes:
  - a. Emissions modeling data for a 1998 episode that is representative of a typical ozone season exceedance that meets the EPA episode selection guidance;
  - b. MOBILE6 for determining on-road mobile emissions;
  - c. NONROAD model data; and,
  - d. Area source database utilizing population data allocated statewide.
3. A 2007 future year modeling emissions inventory will be developed by March 31, 2004. This inventory will sufficiently account for projected future growth in ozone precursor emissions through 2007, particularly from stationary, non-road and on-road mobile sources.
4. Additional inventories will be contingent upon legislative appropriations or other funding. Selection of specific episode inventories will be partially determined by the conceptual model, which reflects an analysis of meteorological conditions typical of high ozone events.
5. Emissions inventories will be compared and analyzed for trends in emission sources over time. The emissions inventory comparison and analysis will be completed by December 31, 2003.

C. Modeling

1. DHEC will be responsible for conducting the meteorological and air quality modeling analysis. DHEC will conduct the modeling analysis based on the "Draft Guidance on the use of Models and Other Analyses in Attainment Demonstrations for the 8-Hour Ozone NAAQS" (EPA-454/R-99-004, May 1999). The modeling will follow the guidance as facilitated by the EPA Regional Office.
2. Base case modeling will be completed by December 31, 2002. Future case modeling will be completed by October 31, 2003. One or more modeled control cases will be completed by January 31, 2004, with final revisions completed by March 31, 2004. All modeling will:
  - be SIP quality and perform within EPA's accepted margin of accuracy;
  - be carefully documented;
  - sufficiently account for projected future growth in ozone precursor emissions;
  - be accomplished by DHEC and reviewed by EPA; and,
  - be used to determine the effectiveness of NO<sub>x</sub> and/or VOC reductions. The control case(s) will be used to determine the relative effectiveness of different emission reduction strategies and to aid in the selection of appropriate emission reduction strategies.

D. Control Strategies

1. All adopted Federal and State control strategies that have been or will be implemented by the December 31, 2007, attainment date will be included in base, future and control case modeling.
2. Additional local and state control strategies under consideration will be identified by June 16, 2003. The local and state control strategies selected will be implemented as soon as practical, but no later than April 1, 2005.
3. Local and state control strategies will be specific, quantified, permanent and enforceable. The strategies will also include specific implementation dates and detailed documentation and reporting processes.
4. Voluntary strategies can play a supporting role in the local early action plan and the early action SIP. If emission reductions from voluntary strategies are quantified and credit is taken for them in the local early action plan or the early action SIP, those emission reductions will be enforceable. Additional strategies must be implemented to meet those quantified reduction requirements if quantified voluntary strategies fail. This is true for all quantified emission reductions.
5. Local and state control strategies will be designed and implemented with full stakeholder participation.

6. Local and state control strategies will be incorporated by DHEC into the early action SIP. In the event that the local area desires to add, delete or substitute strategies after early action SIP submittal, the local area will request a modification. Local early action plan modifications will be treated as SIP revisions and facilitated by DHEC.

E. Maintenance for Growth

1. The early action SIP will include a component to address emissions growth at least five years beyond December 31, 2007, ensuring that the areas will remain in attainment of the 8-hour ozone standard during that period. Attainment maintenance analysis will be completed by January 31, 2004, with final revisions completed by March 31, 2004. The analysis will employ one or more of the following or any other appropriate techniques necessary to make such a demonstration:
  - a. Modeling analysis showing ozone levels below the 8-hour ozone standard in 2012;
  - b. An annual review of growth (especially mobile and stationary source) to ensure control measures and growth assumptions are adequate;
  - c. Identification and quantification of federal, state, and/or local measures indicating sufficient reductions to offset growth estimates; or,
  - d. Any other appropriate techniques necessary to make such a determination.
2. The early action SIP must also detail a continuing planning process that includes modeling updates and modeling assumption verification (particularly growth assumptions). Modeling updates and planning processes must consider and evaluate the following:
  - a. All relevant actual new point sources;
  - b. Impacts from potential new source growth; and,
  - c. Future transportation patterns and their impact on air quality in a manner that is consistent with the most current adopted Long Range Transportation Plan and most current trend and projections of local motor vehicle emissions.
3. If the review of emissions growth in conjunction with the continuing planning process demonstrates that adopted emission reduction strategies are inadequate to address growth in emissions, additional measures will be added to the early action plan. Local planning processes should prepare for this possibility.
4. In the event that the continuing planning process identifies the need to add, delete, or substitute control strategies after the local early action plan has been incorporated into the early action SIP, the local area will initiate, and DHEC will facilitate a SIP revision to accommodate changes.

**F. Public Involvement**

1. Public involvement has been and will continue to be strongly encouraged during the planning and implementation process.
2. Public awareness programs will be used to provide opportunities for involvement in the planning process, implementation of control strategies, and any other issues important to the area.
3. Interested stakeholders (i.e., local, state, and federal government, citizens, public interest groups, and the business community) will continue to be involved in the planning process as early as possible. Planning meetings will be open to the public, with posted meeting times and locations. Early action SIP drafts will be publicly available, and the drafting process will have sufficient opportunities for comment from all interested stakeholders.
4. Opportunities for public comment on the proposed early action SIP will be provided and will follow the traditional SIP revision process as implemented by DHEC.
5. Semi-annual reports detailing, at a minimum, progress toward key milestones, will be made available to the public.
6. DHEC has established and will maintain a website for South Carolina's Early Action Plan for the 8-hour ozone standard, located at [www.scdhec.net/baq/eap.html](http://www.scdhec.net/baq/eap.html).

**III. Local Government Responsibilities**

The local governments agree to develop and implement a local early action plan that will promote the area's attainment by December 31, 2007, of the 8-hour ozone standard and maintenance until at least 2012. The local governments will develop this plan in coordination with the DHEC, EPA, stakeholders and the public. The local early action plan will include a process to evaluate the effectiveness and maintain long-term compliance with the standard.

After all adopted Federal and State controls that have been or will be implemented by the attainment date of December 31, 2007, are accounted for in the modeling, the local area must adopt additional local controls, as necessary to demonstrate attainment of the 8-hour ozone standard by December 31, 2007. Local controls under consideration must be identified and described by June 16, 2003. These measures must be included in the semi-annual report made available to the public.

The draft local early action plan will be submitted to DHEC by August 31, 2003. The final local early action plan will be submitted to DHEC, with a copy forwarded to EPA, by March 31, 2004. The adopted local early action plan will be included in the early action SIP due December 31, 2004.

In the event a development or issue arises that may impact performance or progress toward key milestones (including if a key milestone will be or has been missed and/or if a termination or modification has been requested), the responsible party will notify all other signatories in writing as soon as possible.

#### **IV. The South Carolina Department of Health and Environmental Control**

DHEC agrees to develop and implement a state early action SIP that will demonstrate the participating area's attainment by December 31, 2007, of the 8-hour ozone standard and maintenance until at least 2012. DHEC will develop this plan in coordination with the local governments, EPA, stakeholders and the public. The state early action SIP will include a process to monitor and maintain long-term compliance with the standard.

It is the responsibility of each state under the CAA to ensure attainment with all National Ambient Air Quality Standards. At any such time that an area is deemed non-attainment, the state will be required to develop a plan to return the area(s) to attainment in accordance with the CAA. If applicable, South Carolina is committed to working with adjacent states to assure mutual attainment of national standards.

In the event a development or issue arises that may impact performance or progress toward key milestones (including if a key milestone will be or has been missed and/or if a termination or modification has been requested), DHEC will notify all other signatories in writing as soon as possible.

DHEC will provide support to areas throughout the planning and implementation process by:

1. Developing emission inventories, modeling, trend analysis, and quantification and comparison of control measures.
2. Providing necessary information on all federal and state adopted emission reduction measures, which affect the area.
3. Providing technical and strategic assistance, as appropriate, in the selection and implementation of control strategies.
4. Providing technical and planning assistance in developing and implementing processes to address the impact of emissions growth beyond the attainment date.
5. Maintaining monitors and reporting and analysis of monitoring data.
6. Promoting public awareness efforts.
7. Coordinating communication between local areas and the EPA to facilitate continuing the EPA review of local work.
8. Ensuring expeditious review of local early action plan(s), and if deemed adequate, proposing modification of the early action SIP to adopt the early action plan.

9. Adopting control measures into the early action SIP as expeditiously as possible. The final complete early action SIP revision must be completed, adopted, and submitted by the state to the EPA by December 31, 2004.
10. Tracking progress. If any milestone is missed and EPA withdraws the deferred effective date, thereby triggering a non-attainment designation and applicable statutory requirements, the state will strive to submit a traditional non-attainment SIP within one year. However, due to the South Carolina legislative review process, it may take at least eighteen months.
11. Working concurrently with areas not electing to participate in the early action SIP process in preparing the traditional SIP submittal as required by the CAA.

## **V. The Environmental Protection Agency**

The EPA will participate by:

1. Recognizing the local area's and state's commitment to voluntarily adopt an early, substantive, enforceable, and scientifically-based attainment plan with early implementation of control measures by becoming a party to the EAC developed in conformance with South Carolina's Protocol for Early Action Compacts.
2. Providing technical assistance to the state(s) and local area(s) in the development of the early action plan.
3. Reviewing and approving the completed early action SIP by no later than September 30, 2005.
4. Deferring the effective date of non-attainment designation and related requirements for participating areas that fail to meet the 8-hour ozone standard as long as all terms and key milestones of the EAC are being met, including submission of the early action SIP revision by December 31, 2004.
5. Designating the area expeditiously as attainment and imposing no additional requirements, provided that the monitors in the area reflect attainment by December 31, 2007.
6. Taking action to withdraw the deferred effective date if the area violates the standard as of December 31, 2007, and the area has had the effective date of its non-attainment designation deferred. The area's non-attainment designation will become effective soon after.
7. Ensuring appropriate credit in the traditional SIP process for all emissions reductions from measures implemented in the early action SIP if the area does not meet all the terms of the EAC; including meeting agreed-upon key milestones and is designated (or re-designated if necessary) according to the EPA's 8-hour ozone implementation guidelines. The EPA will offer such an area no delays, exemptions, or other favorable treatment because of its participation in the EAC.

8. Not allowing any area to renew their EAC after December 31, 2007, or initiate a new compact if it has previously forfeited its participation.

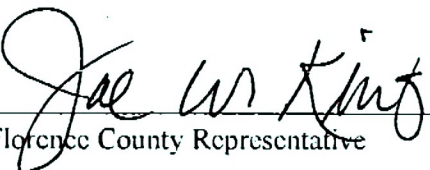
VI. Signatures

  
United States Environmental Protection Agency

Regional Administrator 12-30-02  
Title Date

  
South Carolina  
Department of Health and Environmental Control

Deputy Commissioner 12/27/02  
Title Date

  
Florence County Representative

County Administrator 12/18/02  
Title Date

**SOUTH CAROLINA'S 8-HOUR OZONE  
EARLY ACTION COMPACT  
Marion County**

The United States Environmental Protection Agency (EPA) has provided an option for areas currently meeting the 1-hour ozone standard, like those in South Carolina, to attain the 8-hour ozone standard by December 31, 2007, and obtain cleaner air sooner than federally mandated. This option offers a more expeditious time line for achieving emissions reductions than expected under the EPA's 8-hour ozone implementation rulemaking, while providing "fail-safe" provisions for the area to revert to the traditional State Implementation Plan (SIP) process if specific milestones are not met. Through the development of this Early Action Compact (EAC), local, state, and EPA officials agree to work together to develop and implement local and state early action plans. The plans will become a part of the state early action SIP to reduce ground-level ozone concentrations to comply with the 8-hour ozone standard by December 31, 2007, and maintain the standard beyond that date. Failure to meet the obligations outlined in this EAC will result in immediate reversion to the traditional non-attainment designation process as required in the Clean Air Act (CAA).

In an effort to provide this information to areas within South Carolina, the South Carolina Department of Health and Environmental Control (DHEC) held six public meetings throughout the state. The locations of the meetings were targeted to areas that could potentially be designated as non-attainment for the 8-hour ozone standard. The meetings were held in Columbia, Greenville, Florence, Rock Hill, Aiken and Charleston. EPA officials participated in five of the six meetings. The general public, local government representatives, industry representatives, and environmental interest groups attended the meetings. Prior to the meetings, DHEC issued a press release regarding the development of an early action SIP. Correspondence including a fact sheet was sent to all county administrators, Councils of Governments, Metropolitan Planning Organizations, public interest groups, industry representatives, other state agencies and others determined to be stakeholders in the process.

The Parties to this (EAC) are: Marion County, South Carolina Department of Health and Environmental Control (DHEC) and EPA.

**I. General Provisions**

- A. The parties commit to develop, implement and maintain the early action SIP (which includes the local early action plans) providing EPA defers the effective date of the non-attainment designation and related requirements as long as all conditions of the EAC and key milestones are met.
- B. If the potential area of non-attainment does not meet all the terms of the EAC, then it will forfeit its participation and will be subject to the full planning requirements under applicable CAA

traditional SIP processes including requirements defined as part of the EPA's 8-hour ozone implementation rulemaking.

- C. If the area has had the effective date of a non-attainment designation deferred and the area does not reach attainment of the standard by December 31, 2007, then the non-attainment designation will be effective. If the EPA's implementation schedule also requires a traditional SIP from areas on or before December 31, 2007, then a traditional SIP revision demonstrating attainment by the new attainment date will be due for the non-attainment area no later than December 31, 2008.
- D. Before formal adoption into the early action SIP, this agreement may be modified or terminated by mutual consent of all parties, or any party may withdraw from the agreement by notifying other parties in writing. If a party's withdrawal from the agreement prevents remaining signatories from satisfying any of the terms and milestones of the original agreement, the agreement will be void, any deferred effective date of the non-attainment designation would be withdrawn and the area's non-attainment designation would become effective soon after. Upon termination or withdrawal from the EAC, the area will be subject to the full planning requirements under applicable CAA traditional processes including requirements defined as part of the EPA's 8-hour ozone implementation rulemaking. The local government signatories will approve the local early action plans before submittal to DHEC for inclusion in the early action SIP. Once the local early action plan is incorporated into the early action SIP, any modifications will be treated as SIP revisions.
- E. Execution of this EAC by each Party shall be by signature of each Party's authorized representative. This agreement remains in effect until December 31, 2007.

## II. **Early Action Compact Requirements**

- A. **Milestones and Reporting**  
DHEC and local areas will assess progress towards developing and implementing the early action SIP and make a report available to EPA and the public every six months beginning in June 2003. As per EPA guidance, the key milestones for participation in the EAC are identified in the following table.

<b>Local Plan /Early Action SIP Milestones</b>		
<b>DATE</b>	<b>MILESTONE</b>	<b>RESPONSIBILITY</b>
<b>December 31, 2002</b>	EAC signed by all parties and submitted to EPA	Local/State/EPA
<b>June 16, 2003</b>	Discussion of control measures being considered to EPA	Local/State
<b>March 31, 2004</b>	Final local early action plan submitted to DHEC; copy to EPA	Local
<b>December 31, 2004</b>	Early Action State Implementation Plan submitted to EPA for incorporation into SIP	State
<b>April 1, 2005</b>	Local/State control strategies implemented no later than this date	Local/State
<b>September 30, 2005</b>	EPA takes final action on SIP submitted December 31, 2004	EPA
<b>June 30, 2006</b>	State submits progress report to EPA	State
<b>December 31, 2007</b>	Attainment of the 8-hour ozone standard	Local/State

B. Emissions Inventories

1. DHEC will be responsible for developing emissions inventories.
2. An initial modeling emissions inventory will be completed by December 31, 2002. This inventory includes:
  - a. Emissions modeling data for a 1998 episode that is representative of a typical ozone season exceedance that meets the EPA episode selection guidance;
  - b. MOBILE6 for determining on-road mobile emissions;
  - c. NONROAD model data; and,
  - d. Area source database utilizing population data allocated statewide.
3. A 2007 future year modeling emissions inventory will be developed by March 31, 2004. This inventory will sufficiently account for projected future growth in ozone precursor emissions through 2007, particularly from stationary, non-road and on-road mobile sources.
4. Additional inventories will be contingent upon legislative appropriations or other funding. Selection of specific episode inventories will be partially determined by the conceptual model, which reflects an analysis of meteorological conditions typical of high ozone events.
5. Emissions inventories will be compared and analyzed for trends in emission sources over time. The emissions inventory comparison and analysis will be completed by December 31, 2003.

C. Modeling

1. DHEC will be responsible for conducting the meteorological and air quality modeling analysis. DHEC will conduct the modeling analysis based on the "Draft Guidance on the use of Models and Other Analyses in Attainment Demonstrations for the 8-Hour Ozone NAAQS" (EPA-454/R-99-004, May 1999). The modeling will follow the guidance as facilitated by the EPA Regional Office.
2. Base case modeling will be completed by December 31, 2002. Future case modeling will be completed by October 31, 2003. One or more modeled control cases will be completed by January 31, 2004, with final revisions completed by March 31, 2004. All modeling will:
  - be SIP quality and perform within EPA's accepted margin of accuracy;
  - be carefully documented;
  - sufficiently account for projected future growth in ozone precursor emissions;
  - be accomplished by DHEC and reviewed by EPA; and,
  - be used to determine the effectiveness of NO<sub>x</sub> and/or VOC reductions. The control case(s) will be used to determine the relative effectiveness of different emission reduction strategies and to aid in the selection of appropriate emission reduction strategies.

D. Control Strategies

1. All adopted Federal and State control strategies that have been or will be implemented by the December 31, 2007, attainment date will be included in base, future and control case modeling.
2. Additional local and state control strategies under consideration will be identified by June 16, 2003. The local and state control strategies selected will be implemented as soon as practical, but no later than April 1, 2005.
3. Local and state control strategies will be specific, quantified, permanent and enforceable. The strategies will also include specific implementation dates and detailed documentation and reporting processes.
4. Voluntary strategies can play a supporting role in the local early action plan and the early action SIP. If emission reductions from voluntary strategies are quantified and credit is taken for them in the local early action plan or the early action SIP, those emission reductions will be enforceable. Additional strategies must be implemented to meet those quantified reduction requirements if quantified voluntary strategies fail. This is true for all quantified emission reductions.
5. Local and state control strategies will be designed and implemented with full stakeholder participation.

6. Local and state control strategies will be incorporated by DHEC into the early action SIP. In the event that the local area desires to add, delete or substitute strategies after early action SIP submittal, the local area will request a modification. Local early action plan modifications will be treated as SIP revisions and facilitated by DHEC.

E. Maintenance for Growth

1. The early action SIP will include a component to address emissions growth at least five years beyond December 31, 2007, ensuring that the areas will remain in attainment of the 8-hour ozone standard during that period. Attainment maintenance analysis will be completed by January 31, 2004, with final revisions completed by March 31, 2004. The analysis will employ one or more of the following or any other appropriate techniques necessary to make such a demonstration:
  - a. Modeling analysis showing ozone levels below the 8-hour ozone standard in 2012;
  - b. An annual review of growth (especially mobile and stationary source) to ensure control measures and growth assumptions are adequate;
  - c. Identification and quantification of federal, state, and/or local measures indicating sufficient reductions to offset growth estimates; or,
  - d. Any other appropriate techniques necessary to make such a determination.
2. The early action SIP must also detail a continuing planning process that includes modeling updates and modeling assumption verification (particularly growth assumptions). Modeling updates and planning processes must consider and evaluate the following:
  - a. All relevant actual new point sources;
  - b. Impacts from potential new source growth; and,
  - c. Future transportation patterns and their impact on air quality in a manner that is consistent with the most current adopted Long Range Transportation Plan and most current trend and projections of local motor vehicle emissions.
3. If the review of emissions growth in conjunction with the continuing planning process demonstrates that adopted emission reduction strategies are inadequate to address growth in emissions, additional measures will be added to the early action plan. Local planning processes should prepare for this possibility.
4. In the event that the continuing planning process identifies the need to add, delete, or substitute control strategies after the local early action plan has been incorporated into the early action SIP, the local area will initiate, and DHEC will facilitate a SIP revision to accommodate changes.

**F. Public Involvement**

1. Public involvement has been and will continue to be strongly encouraged during the planning and implementation process.
2. Public awareness programs will be used to provide opportunities for involvement in the planning process, implementation of control strategies, and any other issues important to the area.
3. Interested stakeholders (i.e., local, state, and federal government, citizens, public interest groups, and the business community) will continue to be involved in the planning process as early as possible. Planning meetings will be open to the public, with posted meeting times and locations. Early action SIP drafts will be publicly available, and the drafting process will have sufficient opportunities for comment from all interested stakeholders.
4. Opportunities for public comment on the proposed early action SIP will be provided and will follow the traditional SIP revision process as implemented by DHEC.
5. Semi-annual reports detailing, at a minimum, progress toward key milestones, will be made available to the public.
6. DHEC has established and will maintain a website for South Carolina's Early Action Plan for the 8-hour ozone standard, located at [www.scdhec.net/baq/eap.html](http://www.scdhec.net/baq/eap.html).

**III. Local Government Responsibilities**

The local governments agree to develop and implement a local early action plan that will promote the area's attainment by December 31, 2007, of the 8-hour ozone standard and maintenance until at least 2012. The local governments will develop this plan in coordination with the DHEC, EPA, stakeholders and the public. The local early action plan will include a process to evaluate the effectiveness and maintain long-term compliance with the standard.

After all adopted Federal and State controls that have been or will be implemented by the attainment date of December 31, 2007, are accounted for in the modeling, the local area must adopt additional local controls, as necessary to demonstrate attainment of the 8-hour ozone standard by December 31, 2007. Local controls under consideration must be identified and described by June 16, 2003. These measures must be included in the semi-annual report made available to the public.

The draft local early action plan will be submitted to DHEC by August 31, 2003. The final local early action plan will be submitted to DHEC, with a copy forwarded to EPA, by March 31, 2004. The adopted local early action plan will be included in the early action SIP due December 31, 2004.

In the event a development or issue arises that may impact performance or progress toward key milestones (including if a key milestone will be or has been missed and/or if a termination or modification has been requested), the responsible party will notify all other signatories in writing as soon as possible.

#### **IV. The South Carolina Department of Health and Environmental Control**

DHEC agrees to develop and implement a state early action SIP that will demonstrate the participating area's attainment by December 31, 2007, of the 8-hour ozone standard and maintenance until at least 2012. DHEC will develop this plan in coordination with the local governments, EPA, stakeholders and the public. The state early action SIP will include a process to monitor and maintain long-term compliance with the standard.

It is the responsibility of each state under the CAA to ensure attainment with all National Ambient Air Quality Standards. At any such time that an area is deemed non-attainment, the state will be required to develop a plan to return the area(s) to attainment in accordance with the CAA. If applicable, South Carolina is committed to working with adjacent states to assure mutual attainment of national standards.

In the event a development or issue arises that may impact performance or progress toward key milestones (including if a key milestone will be or has been missed and/or if a termination or modification has been requested), DHEC will notify all other signatories in writing as soon as possible.

DHEC will provide support to areas throughout the planning and implementation process by:

1. Developing emission inventories, modeling, trend analysis, and quantification and comparison of control measures.
2. Providing necessary information on all federal and state adopted emission reduction measures, which affect the area.
3. Providing technical and strategic assistance, as appropriate, in the selection and implementation of control strategies.
4. Providing technical and planning assistance in developing and implementing processes to address the impact of emissions growth beyond the attainment date.
5. Maintaining monitors and reporting and analysis of monitoring data.
6. Promoting public awareness efforts.
7. Coordinating communication between local areas and the EPA to facilitate continuing the EPA review of local work.
8. Ensuring expeditious review of local early action plan(s), and if deemed adequate, proposing modification of the early action SIP to adopt the early action plan.

9. Adopting control measures into the early action SIP as expeditiously as possible. The final complete early action SIP revision must be completed, adopted, and submitted by the state to the EPA by December 31, 2004.
10. Tracking progress. If any milestone is missed and EPA withdraws the deferred effective date, thereby triggering a non-attainment designation and applicable statutory requirements, the state will strive to submit a traditional non-attainment SIP within one year. However, due to the South Carolina legislative review process, it may take at least eighteen months.
11. Working concurrently with areas not electing to participate in the early action SIP process in preparing the traditional SIP submittal as required by the CAA.

## **V. The Environmental Protection Agency**

The EPA will participate by:


1. Recognizing the local area's and state's commitment to voluntarily adopt an early, substantive, enforceable, and scientifically-based attainment plan with early implementation of control measures by becoming a party to the EAC developed in conformance with South Carolina's Protocol for Early Action Compacts.
2. Providing technical assistance to the state(s) and local area(s) in the development of the early action plan.
3. Reviewing and approving the completed early action SIP by no later than September 30, 2005.
4. Deferring the effective date of non-attainment designation and related requirements for participating areas that fail to meet the 8-hour ozone standard as long as all terms and key milestones of the EAC are being met, including submission of the early action SIP revision by December 31, 2004.
5. Designating the area expeditiously as attainment and imposing no additional requirements, provided that the monitors in the area reflect attainment by December 31, 2007.
6. Taking action to withdraw the deferred effective date if the area violates the standard as of December 31, 2007, and the area has had the effective date of its non-attainment designation deferred. The area's non-attainment designation will become effective soon after.
7. Ensuring appropriate credit in the traditional SIP process for all emissions reductions from measures implemented in the early action SIP if the area does not meet all the terms of the EAC; including meeting agreed-upon key milestones and is designated (or re-designated if necessary) according to the EPA's 8-hour ozone implementation guidelines. The EPA will offer such an area no delays, exemptions, or other favorable treatment because of its participation in the EAC.

8. Not allowing any area to renew their EAC after December 31, 2007, or initiate a new compact if it has previously forfeited its participation.

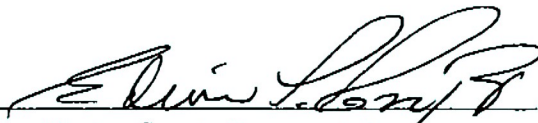
VI. Signatures

  
United States Environmental Protection Agency

Regional Administrator 12-30-02  
Title Date

  
South Carolina  
Department of Health and Environmental Control

Deputy Commissioner 12/20/02  
Title Date

  
Marion County Representative

Administrator December 9, 2002  
Title Date

**SOUTH CAROLINA'S 8-HOUR OZONE  
EARLY ACTION COMPACT**  
Marlboro County

The United States Environmental Protection Agency (EPA) has provided an option for areas currently meeting the 1-hour ozone standard, like those in South Carolina, to attain the 8-hour ozone standard by December 31, 2007, and obtain cleaner air sooner than federally mandated. This option offers a more expeditious time line for achieving emissions reductions than expected under the EPA's 8-hour ozone implementation rulemaking, while providing "fail-safe" provisions for the area to revert to the traditional State Implementation Plan (SIP) process if specific milestones are not met. Through the development of this Early Action Compact (EAC), local, state, and EPA officials agree to work together to develop and implement local and state early action plans. The plans will become a part of the state early action SIP to reduce ground-level ozone concentrations to comply with the 8-hour ozone standard by December 31, 2007, and maintain the standard beyond that date. Failure to meet the obligations outlined in this EAC will result in immediate reversion to the traditional non-attainment designation process as required in the Clean Air Act (CAA).

In an effort to provide this information to areas within South Carolina, the South Carolina Department of Health and Environmental Control (DHEC) held six public meetings throughout the state. The locations of the meetings were targeted to areas that could potentially be designated as non-attainment for the 8-hour ozone standard. The meetings were held in Columbia, Greenville, Florence, Rock Hill, Aiken and Charleston. EPA officials participated in five of the six meetings. The general public, local government representatives, industry representatives, and environmental interest groups attended the meetings. Prior to the meetings, DHEC issued a press release regarding the development of an early action SIP. Correspondence including a fact sheet was sent to all county administrators, Councils of Governments, Metropolitan Planning Organizations, public interest groups, industry representatives, other state agencies and others determined to be stakeholders in the process.

The Parties to this EAC are: Marlboro County, South Carolina Department of Health and Environmental Control (DHEC) and EPA.

**I. General Provisions**

- A. The parties commit to develop, implement and maintain the early action SIP (which includes the local early action plans) providing EPA defers the effective date of the non-attainment designation and related requirements as long as all conditions of the EAC and key milestones are met.
- B. If the potential area of non-attainment does not meet all the terms of the EAC, then it will forfeit its participation and will be subject to the full planning requirements under applicable CAA

traditional SIP processes including requirements defined as part of the EPA's 8-hour ozone implementation rulemaking.

- C. If the area has had the effective date of a non-attainment designation deferred and the area does not reach attainment of the standard by December 31, 2007, then the non-attainment designation will be effective. If the EPA's implementation schedule also requires a traditional SIP from areas on or before December 31, 2007, then a traditional SIP revision demonstrating attainment by the new attainment date will be due for the non-attainment area no later than December 31, 2008.
- D. Before formal adoption into the early action SIP, this agreement may be modified or terminated by mutual consent of all parties, or any party may withdraw from the agreement by notifying other parties in writing. If a party's withdrawal from the agreement prevents remaining signatories from satisfying any of the terms and milestones of the original agreement, the agreement will be void, any deferred effective date of the non-attainment designation would be withdrawn and the area's non-attainment designation would become effective soon after. Upon termination or withdrawal from the EAC, the area will be subject to the full planning requirements under applicable CAA traditional processes including requirements defined as part of the EPA's 8-hour ozone implementation rulemaking. The local government signatories will approve the local early action plans before submittal to DHEC for inclusion in the early action SIP. Once the local early action plan is incorporated into the early action SIP, any modifications will be treated as SIP revisions.
- E. Execution of this EAC by each Party shall be by signature of each Party's authorized representative. This agreement remains in effect until December 31, 2007.

## **II. Early Action Compact Requirements**

- A. **Milestones and Reporting**  
DHEC and local areas will assess progress towards developing and implementing the early action SIP and make a report available to EPA and the public every six months beginning in June 2003. As per EPA guidance, the key milestones for participation in the EAC are identified in the following table.

<b>Local Plan /Early Action SIP Milestones</b>		
<b>DATE</b>	<b>MILESTONE</b>	<b>RESPONSIBILITY</b>
<b>December 31, 2002</b>	EAC signed by all parties and submitted to EPA	Local/State/EPA
<b>June 16, 2003</b>	Discussion of control measures being considered to EPA	Local/State
<b>March 31, 2004</b>	Final local early action plan submitted to DHEC; copy to EPA	Local
<b>December 31, 2004</b>	Early Action State Implementation Plan submitted to EPA for incorporation into SIP	State
<b>April 1, 2005</b>	Local/State control strategies implemented no later than this date	Local/State
<b>September 30, 2005</b>	EPA takes final action on SIP submitted December 31, 2004	EPA
<b>June 30, 2006</b>	State submits progress report to EPA	State
<b>December 31, 2007</b>	Attainment of the 8-hour ozone standard	Local/State

B. Emissions Inventories

1. DHEC will be responsible for developing emissions inventories.
2. An initial modeling emissions inventory will be completed by December 31, 2002. This inventory includes:
  - a. Emissions modeling data for a 1998 episode that is representative of a typical ozone season exceedance that meets the EPA episode selection guidance;
  - b. MOBILE6 for determining on-road mobile emissions;
  - c. NONROAD model data; and,
  - d. Area source database utilizing population data allocated statewide.
3. A 2007 future year modeling emissions inventory will be developed by March 31, 2004. This inventory will sufficiently account for projected future growth in ozone precursor emissions through 2007, particularly from stationary, non-road and on-road mobile sources.
4. Additional inventories will be contingent upon legislative appropriations or other funding. Selection of specific episode inventories will be partially determined by the conceptual model, which reflects an analysis of meteorological conditions typical of high ozone events.
5. Emissions inventories will be compared and analyzed for trends in emission sources over time. The emissions inventory comparison and analysis will be completed by December 31, 2003.

C. Modeling

1. DHEC will be responsible for conducting the meteorological and air quality modeling analysis. DHEC will conduct the modeling analysis based on the "Draft Guidance on the use of Models and Other Analyses in Attainment Demonstrations for the 8-Hour Ozone NAAQS" (EPA-454/R-99-004, May 1999). The modeling will follow the guidance as facilitated by the EPA Regional Office.
2. Base case modeling will be completed by December 31, 2002. Future case modeling will be completed by October 31, 2003. One or more modeled control cases will be completed by January 31, 2004, with final revisions completed by March 31, 2004. All modeling will:
  - be SIP quality and perform within EPA's accepted margin of accuracy;
  - be carefully documented;
  - sufficiently account for projected future growth in ozone precursor emissions;
  - be accomplished by DHEC and reviewed by EPA; and,
  - be used to determine the effectiveness of NO<sub>x</sub> and/or VOC reductions. The control case(s) will be used to determine the relative effectiveness of different emission reduction strategies and to aid in the selection of appropriate emission reduction strategies.

D. Control Strategies

1. All adopted Federal and State control strategies that have been or will be implemented by the December 31, 2007, attainment date will be included in base, future and control case modeling.
2. Additional local and state control strategies under consideration will be identified by June 16, 2003. The local and state control strategies selected will be implemented as soon as practical, but no later than April 1, 2005.
3. Local and state control strategies will be specific, quantified, permanent and enforceable. The strategies will also include specific implementation dates and detailed documentation and reporting processes.
4. Voluntary strategies can play a supporting role in the local early action plan and the early action SIP. If emission reductions from voluntary strategies are quantified and credit is taken for them in the local early action plan or the early action SIP, those emission reductions will be enforceable. Additional strategies must be implemented to meet those quantified reduction requirements if quantified voluntary strategies fail. This is true for all quantified emission reductions.
5. Local and state control strategies will be designed and implemented with full stakeholder participation.

6. Local and state control strategies will be incorporated by DHEC into the early action SIP. In the event that the local area desires to add, delete or substitute strategies after early action SIP submittal, the local area will request a modification. Local early action plan modifications will be treated as SIP revisions and facilitated by DHEC.

E. Maintenance for Growth

1. The early action SIP will include a component to address emissions growth at least five years beyond December 31, 2007, ensuring that the areas will remain in attainment of the 8-hour ozone standard during that period. Attainment maintenance analysis will be completed by January 31, 2004, with final revisions completed by March 31, 2004. The analysis will employ one or more of the following or any other appropriate techniques necessary to make such a demonstration:
  - a. Modeling analysis showing ozone levels below the 8-hour ozone standard in 2012;
  - b. An annual review of growth (especially mobile and stationary source) to ensure control measures and growth assumptions are adequate;
  - c. Identification and quantification of federal, state, and/or local measures indicating sufficient reductions to offset growth estimates; or,
  - d. Any other appropriate techniques necessary to make such a determination.
2. The early action SIP must also detail a continuing planning process that includes modeling updates and modeling assumption verification (particularly growth assumptions). Modeling updates and planning processes must consider and evaluate the following:
  - a. All relevant actual new point sources;
  - b. Impacts from potential new source growth; and,
  - c. Future transportation patterns and their impact on air quality in a manner that is consistent with the most current adopted Long Range Transportation Plan and most current trend and projections of local motor vehicle emissions.
3. If the review of emissions growth in conjunction with the continuing planning process demonstrates that adopted emission reduction strategies are inadequate to address growth in emissions, additional measures will be added to the early action plan. Local planning processes should prepare for this possibility.
4. In the event that the continuing planning process identifies the need to add, delete, or substitute control strategies after the local early action plan has been incorporated into the early action SIP, the local area will initiate, and DHEC will facilitate a SIP revision to accommodate changes.

**F. Public Involvement**

1. Public involvement has been and will continue to be strongly encouraged during the planning and implementation process.
2. Public awareness programs will be used to provide opportunities for involvement in the planning process, implementation of control strategies, and any other issues important to the area.
3. Interested stakeholders (i.e., local, state, and federal government, citizens, public interest groups, and the business community) will continue to be involved in the planning process as early as possible. Planning meetings will be open to the public, with posted meeting times and locations. Early action SIP drafts will be publicly available, and the drafting process will have sufficient opportunities for comment from all interested stakeholders.
4. Opportunities for public comment on the proposed early action SIP will be provided and will follow the traditional SIP revision process as implemented by DHEC.
5. Semi-annual reports detailing, at a minimum, progress toward key milestones, will be made available to the public.
6. DHEC has established and will maintain a website for South Carolina's Early Action Plan for the 8-hour ozone standard, located at [www.scdhec.net/baq/eap.html](http://www.scdhec.net/baq/eap.html).

**III. Local Government Responsibilities**

The local governments agree to develop and implement a local early action plan that will promote the area's attainment by December 31, 2007, of the 8-hour ozone standard and maintenance until at least 2012. The local governments will develop this plan in coordination with the DHEC, EPA, stakeholders and the public. The local early action plan will include a process to evaluate the effectiveness and maintain long-term compliance with the standard.

After all adopted Federal and State controls that have been or will be implemented by the attainment date of December 31, 2007, are accounted for in the modeling, the local area must adopt additional local controls, as necessary to demonstrate attainment of the 8-hour ozone standard by December 31, 2007. Local controls under consideration must be identified and described by June 16, 2003. These measures must be included in the semi-annual report made available to the public.

The draft local early action plan will be submitted to DHEC by August 31, 2003. The final local early action plan will be submitted to DHEC, with a copy forwarded to EPA, by March 31, 2004. The adopted local early action plan will be included in the early action SIP due December 31, 2004.

In the event a development or issue arises that may impact performance or progress toward key milestones (including if a key milestone will be or has been missed and/or if a termination or modification has been requested), the responsible party will notify all other signatories in writing as soon as possible.

#### **IV. The South Carolina Department of Health and Environmental Control**

DHEC agrees to develop and implement a state early action SIP that will demonstrate the participating area's attainment by December 31, 2007, of the 8-hour ozone standard and maintenance until at least 2012. DHEC will develop this plan in coordination with the local governments, EPA, stakeholders and the public. The state early action SIP will include a process to monitor and maintain long-term compliance with the standard.

It is the responsibility of each state under the CAA to ensure attainment with all National Ambient Air Quality Standards. At any such time that an area is deemed non-attainment, the state will be required to develop a plan to return the area(s) to attainment in accordance with the CAA. If applicable, South Carolina is committed to working with adjacent states to assure mutual attainment of national standards.

In the event a development or issue arises that may impact performance or progress toward key milestones (including if a key milestone will be or has been missed and/or if a termination or modification has been requested), DHEC will notify all other signatories in writing as soon as possible.

DHEC will provide support to areas throughout the planning and implementation process by:

1. Developing emission inventories, modeling, trend analysis, and quantification and comparison of control measures.
2. Providing necessary information on all federal and state adopted emission reduction measures, which affect the area.
3. Providing technical and strategic assistance, as appropriate, in the selection and implementation of control strategies.
4. Providing technical and planning assistance in developing and implementing processes to address the impact of emissions growth beyond the attainment date.
5. Maintaining monitors and reporting and analysis of monitoring data.
6. Promoting public awareness efforts.
7. Coordinating communication between local areas and the EPA to facilitate continuing the EPA review of local work.
8. Ensuring expeditious review of local early action plan(s), and if deemed adequate, proposing modification of the early action SIP to adopt the early action plan.

9. Adopting control measures into the early action SIP as expeditiously as possible. The final complete early action SIP revision must be completed, adopted, and submitted by the state to the EPA by December 31, 2004.
10. Tracking progress. If any milestone is missed and EPA withdraws the deferred effective date, thereby triggering a non-attainment designation and applicable statutory requirements, the state will strive to submit a traditional non-attainment SIP within one year. However, due to the South Carolina legislative review process, it may take at least eighteen months.
11. Working concurrently with areas not electing to participate in the early action SIP process in preparing the traditional SIP submittal as required by the CAA.

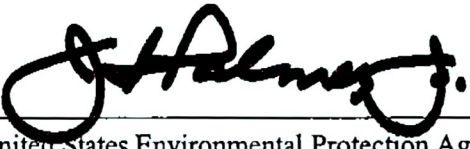
## **V. The Environmental Protection Agency**

The EPA will participate by:

1. Recognizing the local area's and state's commitment to voluntarily adopt an early, substantive, enforceable, and scientifically-based attainment plan with early implementation of control measures by becoming a party to the EAC developed in conformance with South Carolina's Protocol for Early Action Compacts.
2. Providing technical assistance to the state(s) and local area(s) in the development of the early action plan.
3. Reviewing and approving the completed early action SIP by no later than September 30, 2005.
4. Deferring the effective date of non-attainment designation and related requirements for participating areas that fail to meet the 8-hour ozone standard as long as all terms and key milestones of the EAC are being met, including submission of the early action SIP revision by December 31, 2004.
5. Designating the area expeditiously as attainment and imposing no additional requirements, provided that the monitors in the area reflect attainment by December 31, 2007.
6. Taking action to withdraw the deferred effective date if the area violates the standard as of December 31, 2007, and the area has had the effective date of its non-attainment designation deferred. The area's non-attainment designation will become effective soon after.
7. Ensuring appropriate credit in the traditional SIP process for all emissions reductions from measures implemented in the early action SIP if the area does not meet all the terms of the EAC; including meeting agreed-upon key milestones and is designated (or re-designated if necessary) according to the EPA's 8-hour ozone implementation guidelines. The EPA will offer such an area no delays, exemptions, or other favorable treatment because of its participation in the EAC.

8. Not allowing any area to renew their EAC after December 31, 2007, or initiate a new compact if it has previously forfeited its participation.

VI. Signatures

  
United States Environmental Protection Agency

Regional Administrator 12-30-02  
Title Date

R. L. Shaw  
South Carolina  
Department of Health and Environmental Control

Deputy Commissioner 12/20/02  
Title Date

Anne K. Hubbard  
Marlboro County Representative

County Administrator 12-17-02  
Title Date

# **Santee Lynches Area**

## **Local Early Action Compacts**

**December 2002**



**SOUTH CAROLINA'S 8-HOUR OZONE  
EARLY ACTION COMPACT**  
Clarendon County

The United States Environmental Protection Agency (EPA) has provided an option for areas currently meeting the 1-hour ozone standard, like those in South Carolina, to attain the 8-hour ozone standard by December 31, 2007, and obtain cleaner air sooner than federally mandated. This option offers a more expeditious time line for achieving emissions reductions than expected under the EPA's 8-hour ozone implementation rulemaking, while providing "fail-safe" provisions for the area to revert to the traditional State Implementation Plan (SIP) process if specific milestones are not met. Through the development of this Early Action Compact (EAC), local, state, and EPA officials agree to work together to develop and implement local and state early action plans. The plans will become a part of the state early action SIP to reduce ground-level ozone concentrations to comply with the 8-hour ozone standard by December 31, 2007, and maintain the standard beyond that date. Failure to meet the obligations outlined in this EAC will result in immediate reversion to the traditional non-attainment designation process as required in the Clean Air Act (CAA).

In an effort to provide this information to areas within South Carolina, the South Carolina Department of Health and Environmental Control (DHEC) held six public meetings throughout the state. The locations of the meetings were targeted to areas that could potentially be designated as non-attainment for the 8-hour ozone standard. The meetings were held in Columbia, Greenville, Florence, Rock Hill, Aiken and Charleston. EPA officials participated in five of the six meetings. The general public, local government representatives, industry representatives, and environmental interest groups attended the meetings. Prior to the meetings, DHEC issued a press release regarding the development of an early action SIP. Correspondence including a fact sheet was sent to all county administrators, Councils of Governments, Metropolitan Planning Organizations, public interest groups, industry representatives, other state agencies and others determined to be stakeholders in the process.

The Parties to this EAC are: Clarendon County, South Carolina Department of Health and Environmental Control (DHEC) and EPA.

**I. General Provisions**

- A. The parties commit to develop, implement and maintain the early action SIP (which includes the local early action plans) providing EPA defers the effective date of the non-attainment designation and related requirements as long as all conditions of the EAC and key milestones are met.
- B. If the potential area of non-attainment does not meet all the terms of the EAC, then it will forfeit its participation and will be subject to the full planning requirements under applicable CAA

traditional SIP processes including requirements defined as part of the EPA's 8-hour ozone implementation rulemaking.

- C. If the area has had the effective date of a non-attainment designation deferred and the area does not reach attainment of the standard by December 31, 2007, then the non-attainment designation will be effective. If the EPA's implementation schedule also requires a traditional SIP from areas on or before December 31, 2007, then a traditional SIP revision demonstrating attainment by the new attainment date will be due for the non-attainment area no later than December 31, 2008.
- D. Before formal adoption into the early action SIP, this agreement may be modified or terminated by mutual consent of all parties, or any party may withdraw from the agreement by notifying other parties in writing. If a party's withdrawal from the agreement prevents remaining signatories from satisfying any of the terms and milestones of the original agreement, the agreement will be void, any deferred effective date of the non-attainment designation would be withdrawn and the area's non-attainment designation would become effective soon after. Upon termination or withdrawal from the EAC, the area will be subject to the full planning requirements under applicable CAA traditional processes including requirements defined as part of the EPA's 8-hour ozone implementation rulemaking. The local government signatories will approve the local early action plans before submittal to DHEC for inclusion in the early action SIP. Once the local early action plan is incorporated into the early action SIP, any modifications will be treated as SIP revisions.
- E. Execution of this EAC by each Party shall be by signature of each Party's authorized representative. This agreement remains in effect until December 31, 2007.

## II. **Early Action Compact Requirements**

- A. **Milestones and Reporting**  
DHEC and local areas will assess progress towards developing and implementing the early action SIP and make a report available to EPA and the public every six months beginning in June 2003. As per EPA guidance, the key milestones for participation in the EAC are identified in the following table.

<b>Local Plan /Early Action SIP Milestones</b>		
<b>DATE</b>	<b>MILESTONE</b>	<b>RESPONSIBILITY</b>
<b>December 31, 2002</b>	EAC signed by all parties and submitted to EPA	Local/State/EPA
<b>June 16, 2003</b>	Discussion of control measures being considered to EPA	Local/State
<b>March 31, 2004</b>	Final local early action plan submitted to DHEC; copy to EPA	Local
<b>December 31, 2004</b>	Early Action State Implementation Plan submitted to EPA for incorporation into SIP	State
<b>April 1, 2005</b>	Local/State control strategies implemented no later than this date	Local/State
<b>September 30, 2005</b>	EPA takes final action on SIP submitted December 31, 2004	EPA
<b>June 30, 2006</b>	State submits progress report to EPA	State
<b>December 31, 2007</b>	Attainment of the 8-hour ozone standard	Local/State

B. Emissions Inventories

1. DHEC will be responsible for developing emissions inventories.
2. An initial modeling emissions inventory will be completed by December 31, 2002. This inventory includes:
  - a. Emissions modeling data for a 1998 episode that is representative of a typical ozone season exceedance that meets the EPA episode selection guidance;
  - b. MOBILE6 for determining on-road mobile emissions;
  - c. NONROAD model data; and,
  - d. Area source database utilizing population data allocated statewide.
3. A 2007 future year modeling emissions inventory will be developed by March 31, 2004. This inventory will sufficiently account for projected future growth in ozone precursor emissions through 2007, particularly from stationary, non-road and on-road mobile sources.
4. Additional inventories will be contingent upon legislative appropriations or other funding. Selection of specific episode inventories will be partially determined by the conceptual model, which reflects an analysis of meteorological conditions typical of high ozone events.
5. Emissions inventories will be compared and analyzed for trends in emission sources over time. The emissions inventory comparison and analysis will be completed by December 31, 2003.

C. Modeling

1. DHEC will be responsible for conducting the meteorological and air quality modeling analysis. DHEC will conduct the modeling analysis based on the "Draft Guidance on the use of Models and Other Analyses in Attainment Demonstrations for the 8-Hour Ozone NAAQS" (EPA-454/R-99-004, May 1999). The modeling will follow the guidance as facilitated by the EPA Regional Office.
2. Base case modeling will be completed by December 31, 2002. Future case modeling will be completed by October 31, 2003. One or more modeled control cases will be completed by January 31, 2004, with final revisions completed by March 31, 2004. All modeling will:
  - be SIP quality and perform within EPA's accepted margin of accuracy;
  - be carefully documented;
  - sufficiently account for projected future growth in ozone precursor emissions;
  - be accomplished by DHEC and reviewed by EPA; and,
  - be used to determine the effectiveness of NO<sub>x</sub> and/or VOC reductions. The control case(s) will be used to determine the relative effectiveness of different emission reduction strategies and to aid in the selection of appropriate emission reduction strategies.

D. Control Strategies

1. All adopted Federal and State control strategies that have been or will be implemented by the December 31, 2007, attainment date will be included in base, future and control case modeling.
2. Additional local and state control strategies under consideration will be identified by June 16, 2003. The local and state control strategies selected will be implemented as soon as practical, but no later than April 1, 2005.
3. Local and state control strategies will be specific, quantified, permanent and enforceable. The strategies will also include specific implementation dates and detailed documentation and reporting processes.
4. Voluntary strategies can play a supporting role in the local early action plan and the early action SIP. If emission reductions from voluntary strategies are quantified and credit is taken for them in the local early action plan or the early action SIP, those emission reductions will be enforceable. Additional strategies must be implemented to meet those quantified reduction requirements if quantified voluntary strategies fail. This is true for all quantified emission reductions.
5. Local and state control strategies will be designed and implemented with full stakeholder participation.

6. Local and state control strategies will be incorporated by DHEC into the early action SIP. In the event that the local area desires to add, delete or substitute strategies after early action SIP submittal, the local area will request a modification. Local early action plan modifications will be treated as SIP revisions and facilitated by DHEC.

E. Maintenance for Growth

1. The early action SIP will include a component to address emissions growth at least five years beyond December 31, 2007, ensuring that the areas will remain in attainment of the 8-hour ozone standard during that period. Attainment maintenance analysis will be completed by January 31, 2004, with final revisions completed by March 31, 2004. The analysis will employ one or more of the following or any other appropriate techniques necessary to make such a demonstration:
  - a. Modeling analysis showing ozone levels below the 8-hour ozone standard in 2012;
  - b. An annual review of growth (especially mobile and stationary source) to ensure control measures and growth assumptions are adequate;
  - c. Identification and quantification of federal, state, and/or local measures indicating sufficient reductions to offset growth estimates; or,
  - d. Any other appropriate techniques necessary to make such a determination.
2. The early action SIP must also detail a continuing planning process that includes modeling updates and modeling assumption verification (particularly growth assumptions). Modeling updates and planning processes must consider and evaluate the following:
  - a. All relevant actual new point sources;
  - b. Impacts from potential new source growth; and,
  - c. Future transportation patterns and their impact on air quality in a manner that is consistent with the most current adopted Long Range Transportation Plan and most current trend and projections of local motor vehicle emissions.
3. If the review of emissions growth in conjunction with the continuing planning process demonstrates that adopted emission reduction strategies are inadequate to address growth in emissions, additional measures will be added to the early action plan. Local planning processes should prepare for this possibility.
4. In the event that the continuing planning process identifies the need to add, delete, or substitute control strategies after the local early action plan has been incorporated into the early action SIP, the local area will initiate, and DHEC will facilitate a SIP revision to accommodate changes.

**F. Public Involvement**

1. Public involvement has been and will continue to be strongly encouraged during the planning and implementation process.
2. Public awareness programs will be used to provide opportunities for involvement in the planning process, implementation of control strategies, and any other issues important to the area.
3. Interested stakeholders (i.e., local, state, and federal government, citizens, public interest groups, and the business community) will continue to be involved in the planning process as early as possible. Planning meetings will be open to the public, with posted meeting times and locations. Early action SIP drafts will be publicly available, and the drafting process will have sufficient opportunities for comment from all interested stakeholders.
4. Opportunities for public comment on the proposed early action SIP will be provided and will follow the traditional SIP revision process as implemented by DHEC.
5. Semi-annual reports detailing, at a minimum, progress toward key milestones, will be made available to the public.
6. DHEC has established and will maintain a website for South Carolina's Early Action Plan for the 8-hour ozone standard, located at [www.scdhec.net/baq/eap.html](http://www.scdhec.net/baq/eap.html).

**III. Local Government Responsibilities**

The local governments agree to develop and implement a local early action plan that will promote the area's attainment by December 31, 2007, of the 8-hour ozone standard and maintenance until at least 2012. The local governments will develop this plan in coordination with the DHEC, EPA, stakeholders and the public. The local early action plan will include a process to evaluate the effectiveness and maintain long-term compliance with the standard.

After all adopted Federal and State controls that have been or will be implemented by the attainment date of December 31, 2007, are accounted for in the modeling, the local area must adopt additional local controls, as necessary to demonstrate attainment of the 8-hour ozone standard by December 31, 2007. Local controls under consideration must be identified and described by June 16, 2003. These measures must be included in the semi-annual report made available to the public.

The draft local early action plan will be submitted to DHEC by August 31, 2003. The final local early action plan will be submitted to DHEC, with a copy forwarded to EPA, by March 31, 2004. The adopted local early action plan will be included in the early action SIP due December 31, 2004.

In the event a development or issue arises that may impact performance or progress toward key milestones (including if a key milestone will be or has been missed and/or if a termination or modification has been requested), the responsible party will notify all other signatories in writing as soon as possible.

#### **IV. The South Carolina Department of Health and Environmental Control**

DHEC agrees to develop and implement a state early action SIP that will demonstrate the participating area's attainment by December 31, 2007, of the 8-hour ozone standard and maintenance until at least 2012. DHEC will develop this plan in coordination with the local governments, EPA, stakeholders and the public. The state early action SIP will include a process to monitor and maintain long-term compliance with the standard.

It is the responsibility of each state under the CAA to ensure attainment with all National Ambient Air Quality Standards. At any such time that an area is deemed non-attainment, the state will be required to develop a plan to return the area(s) to attainment in accordance with the CAA. If applicable, South Carolina is committed to working with adjacent states to assure mutual attainment of national standards.

In the event a development or issue arises that may impact performance or progress toward key milestones (including if a key milestone will be or has been missed and/or if a termination or modification has been requested), DHEC will notify all other signatories in writing as soon as possible.

DHEC will provide support to areas throughout the planning and implementation process by:

1. Developing emission inventories, modeling, trend analysis, and quantification and comparison of control measures.
2. Providing necessary information on all federal and state adopted emission reduction measures, which affect the area.
3. Providing technical and strategic assistance, as appropriate, in the selection and implementation of control strategies.
4. Providing technical and planning assistance in developing and implementing processes to address the impact of emissions growth beyond the attainment date.
5. Maintaining monitors and reporting and analysis of monitoring data.
6. Promoting public awareness efforts.
7. Coordinating communication between local areas and the EPA to facilitate continuing the EPA review of local work.
8. Ensuring expeditious review of local early action plan(s), and if deemed adequate, proposing modification of the early action SIP to adopt the early action plan.

9. Adopting control measures into the early action SIP as expeditiously as possible. The final complete early action SIP revision must be completed, adopted, and submitted by the state to the EPA by December 31, 2004.
10. Tracking progress. If any milestone is missed and EPA withdraws the deferred effective date, thereby triggering a non-attainment designation and applicable statutory requirements, the state will strive to submit a traditional non-attainment SIP within one year. However, due to the South Carolina legislative review process, it may take at least eighteen months.
11. Working concurrently with areas not electing to participate in the early action SIP process in preparing the traditional SIP submittal as required by the CAA.

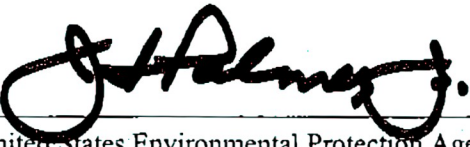
## **V. The Environmental Protection Agency**

The EPA will participate by:


1. Recognizing the local area's and state's commitment to voluntarily adopt an early, substantive, enforceable, and scientifically-based attainment plan with early implementation of control measures by becoming a party to the EAC developed in conformance with South Carolina's Protocol for Early Action Compacts.
2. Providing technical assistance to the state(s) and local area(s) in the development of the early action plan.
3. Reviewing and approving the completed early action SIP by no later than September 30, 2005.
4. Deferring the effective date of non-attainment designation and related requirements for participating areas that fail to meet the 8-hour ozone standard as long as all terms and key milestones of the EAC are being met, including submission of the early action SIP revision by December 31, 2004.
5. Designating the area expeditiously as attainment and imposing no additional requirements, provided that the monitors in the area reflect attainment by December 31, 2007.
6. Taking action to withdraw the deferred effective date if the area violates the standard as of December 31, 2007, and the area has had the effective date of its non-attainment designation deferred. The area's non-attainment designation will become effective soon after.
7. Ensuring appropriate credit in the traditional SIP process for all emissions reductions from measures implemented in the early action SIP if the area does not meet all the terms of the EAC; including meeting agreed-upon key milestones and is designated (or re-designated if necessary) according to the EPA's 8-hour ozone implementation guidelines. The EPA will offer such an area no delays, exemptions, or other favorable treatment because of its participation in the EAC.

8. Not allowing any area to renew their EAC after December 31, 2007, or initiate a new compact if it has previously forfeited its participation.

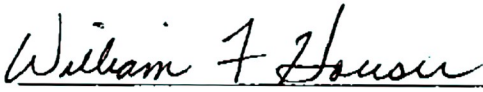
VI. Signatures

  
United States Environmental Protection Agency

Regional Administrator 12-30-02  
Title Date

  
South Carolina  
Department of Health and Environmental Control

Deputy Commissioner 12/20/02  
Title Date

  
Clarendon County Representative

County Administrator 12-19-02  
Title Date

**SOUTH CAROLINA'S 8-HOUR OZONE  
EARLY ACTION COMPACT  
Kershaw County**

The United States Environmental Protection Agency (EPA) has provided an option for areas currently meeting the 1-hour ozone standard, like those in South Carolina, to attain the 8-hour ozone standard by December 31, 2007, and obtain cleaner air sooner than federally mandated. This option offers a more expeditious time line for achieving emissions reductions than expected under the EPA's 8-hour ozone implementation rulemaking, while providing "fail-safe" provisions for the area to revert to the traditional State Implementation Plan (SIP) process if specific milestones are not met. Through the development of this Early Action Compact (EAC), local, state, and EPA officials agree to work together to develop and implement local and state early action plans. The plans will become a part of the state early action SIP to reduce ground-level ozone concentrations to comply with the 8-hour ozone standard by December 31, 2007, and maintain the standard beyond that date. Failure to meet the obligations outlined in this EAC will result in immediate reversion to the traditional non-attainment designation process as required in the Clean Air Act (CAA).

In an effort to provide this information to areas within South Carolina, the South Carolina Department of Health and Environmental Control (DHEC) held six public meetings throughout the state. The locations of the meetings were targeted to areas that could potentially be designated as non-attainment for the 8-hour ozone standard. The meetings were held in Columbia, Greenville, Florence, Rock Hill, Aiken and Charleston. EPA officials participated in five of the six meetings. The general public, local government representatives, industry representatives, and environmental interest groups attended the meetings. Prior to the meetings, DHEC issued a press release regarding the development of an early action SIP. Correspondence including a fact sheet was sent to all county administrators, Councils of Governments, Metropolitan Planning Organizations, public interest groups, industry representatives, other state agencies and others determined to be stakeholders in the process.

The Parties to this EAC are: Kershaw County, South Carolina Department of Health and Environmental Control (DHEC) and EPA.

**I. General Provisions**

- A. The parties commit to develop, implement and maintain the early action SIP (which includes the local early action plans) providing EPA defers the effective date of the non-attainment designation and related requirements as long as all conditions of the EAC and key milestones are met.
- B. If the potential area of non-attainment does not meet all the terms of the EAC, then it will forfeit its participation and will be subject to the full planning requirements under applicable CAA

traditional SIP processes including requirements defined as part of the EPA's 8-hour ozone implementation rulemaking.

- C. If the area has had the effective date of a non-attainment designation deferred and the area does not reach attainment of the standard by December 31, 2007, then the non-attainment designation will be effective. If the EPA's implementation schedule also requires a traditional SIP from areas on or before December 31, 2007, then a traditional SIP revision demonstrating attainment by the new attainment date will be due for the non-attainment area no later than December 31, 2008.
- D. Before formal adoption into the early action SIP, this agreement may be modified or terminated by mutual consent of all parties, or any party may withdraw from the agreement by notifying other parties in writing. If a party's withdrawal from the agreement prevents remaining signatories from satisfying any of the terms and milestones of the original agreement, the agreement will be void, any deferred effective date of the non-attainment designation would be withdrawn and the area's non-attainment designation would become effective soon after. Upon termination or withdrawal from the EAC, the area will be subject to the full planning requirements under applicable CAA traditional processes including requirements defined as part of the EPA's 8-hour ozone implementation rulemaking. The local government signatories will approve the local early action plans before submittal to DHEC for inclusion in the early action SIP. Once the local early action plan is incorporated into the early action SIP, any modifications will be treated as SIP revisions.
- E. Execution of this EAC by each Party shall be by signature of each Party's authorized representative. This agreement remains in effect until December 31, 2007.

## II. **Early Action Compact Requirements**

- A. **Milestones and Reporting**  
DHEC and local areas will assess progress towards developing and implementing the early action SIP and make a report available to EPA and the public every six months beginning in June 2003. As per EPA guidance, the key milestones for participation in the EAC are identified in the following table.

<b>Local Plan /Early Action SIP Milestones</b>		
<b>DATE</b>	<b>MILESTONE</b>	<b>RESPONSIBILITY</b>
<b>December 31, 2002</b>	EAC signed by all parties and submitted to EPA	Local/State/EPA
<b>June 16, 2003</b>	Discussion of control measures being considered to EPA	Local/State
<b>March 31, 2004</b>	Final local early action plan submitted to DHEC; copy to EPA	Local
<b>December 31, 2004</b>	Early Action State Implementation Plan submitted to EPA for incorporation into SIP	State
<b>April 1, 2005</b>	Local/State control strategies implemented no later than this date	Local/State
<b>September 30, 2005</b>	EPA takes final action on SIP submitted December 31, 2004	EPA
<b>June 30, 2006</b>	State submits progress report to EPA	State
<b>December 31, 2007</b>	Attainment of the 8-hour ozone standard	Local/State

B. Emissions Inventories

1. DHEC will be responsible for developing emissions inventories.
2. An initial modeling emissions inventory will be completed by December 31, 2002. This inventory includes:
  - a. Emissions modeling data for a 1998 episode that is representative of a typical ozone season exceedance that meets the EPA episode selection guidance;
  - b. MOBILE6 for determining on-road mobile emissions;
  - c. NONROAD model data; and,
  - d. Area source database utilizing population data allocated statewide.
3. A 2007 future year modeling emissions inventory will be developed by March 31, 2004. This inventory will sufficiently account for projected future growth in ozone precursor emissions through 2007, particularly from stationary, non-road and on-road mobile sources.
4. Additional inventories will be contingent upon legislative appropriations or other funding. Selection of specific episode inventories will be partially determined by the conceptual model, which reflects an analysis of meteorological conditions typical of high ozone events.
5. Emissions inventories will be compared and analyzed for trends in emission sources over time. The emissions inventory comparison and analysis will be completed by December 31, 2003.

C. Modeling

1. DHEC will be responsible for conducting the meteorological and air quality modeling analysis. DHEC will conduct the modeling analysis based on the "Draft Guidance on the use of Models and Other Analyses in Attainment Demonstrations for the 8-Hour Ozone NAAQS" (EPA-454/R-99-004, May 1999). The modeling will follow the guidance as facilitated by the EPA Regional Office.
2. Base case modeling will be completed by December 31, 2002. Future case modeling will be completed by October 31, 2003. One or more modeled control cases will be completed by January 31, 2004, with final revisions completed by March 31, 2004. All modeling will:
  - be SIP quality and perform within EPA's accepted margin of accuracy;
  - be carefully documented;
  - sufficiently account for projected future growth in ozone precursor emissions;
  - be accomplished by DHEC and reviewed by EPA; and,
  - be used to determine the effectiveness of NO<sub>x</sub> and/or VOC reductions. The control case(s) will be used to determine the relative effectiveness of different emission reduction strategies and to aid in the selection of appropriate emission reduction strategies.

D. Control Strategies

1. All adopted Federal and State control strategies that have been or will be implemented by the December 31, 2007, attainment date will be included in base, future and control case modeling.
2. Additional local and state control strategies under consideration will be identified by June 16, 2003. The local and state control strategies selected will be implemented as soon as practical, but no later than April 1, 2005.
3. Local and state control strategies will be specific, quantified, permanent and enforceable. The strategies will also include specific implementation dates and detailed documentation and reporting processes.
4. Voluntary strategies can play a supporting role in the local early action plan and the early action SIP. If emission reductions from voluntary strategies are quantified and credit is taken for them in the local early action plan or the early action SIP, those emission reductions will be enforceable. Additional strategies must be implemented to meet those quantified reduction requirements if quantified voluntary strategies fail. This is true for all quantified emission reductions.
5. Local and state control strategies will be designed and implemented with full stakeholder participation.

6. Local and state control strategies will be incorporated by DHEC into the early action SIP. In the event that the local area desires to add, delete or substitute strategies after early action SIP submittal, the local area will request a modification. Local early action plan modifications will be treated as SIP revisions and facilitated by DHEC.

E. Maintenance for Growth

1. The early action SIP will include a component to address emissions growth at least five years beyond December 31, 2007, ensuring that the areas will remain in attainment of the 8-hour ozone standard during that period. Attainment maintenance analysis will be completed by January 31, 2004, with final revisions completed by March 31, 2004. The analysis will employ one or more of the following or any other appropriate techniques necessary to make such a demonstration:
  - a. Modeling analysis showing ozone levels below the 8-hour ozone standard in 2012;
  - b. An annual review of growth (especially mobile and stationary source) to ensure control measures and growth assumptions are adequate;
  - c. Identification and quantification of federal, state, and/or local measures indicating sufficient reductions to offset growth estimates; or,
  - d. Any other appropriate techniques necessary to make such a determination.
2. The early action SIP must also detail a continuing planning process that includes modeling updates and modeling assumption verification (particularly growth assumptions). Modeling updates and planning processes must consider and evaluate the following:
  - a. All relevant actual new point sources;
  - b. Impacts from potential new source growth; and,
  - c. Future transportation patterns and their impact on air quality in a manner that is consistent with the most current adopted Long Range Transportation Plan and most current trend and projections of local motor vehicle emissions.
3. If the review of emissions growth in conjunction with the continuing planning process demonstrates that adopted emission reduction strategies are inadequate to address growth in emissions, additional measures will be added to the early action plan. Local planning processes should prepare for this possibility.
4. In the event that the continuing planning process identifies the need to add, delete, or substitute control strategies after the local early action plan has been incorporated into the early action SIP, the local area will initiate, and DHEC will facilitate a SIP revision to accommodate changes.

**F. Public Involvement**

1. Public involvement has been and will continue to be strongly encouraged during the planning and implementation process.
2. Public awareness programs will be used to provide opportunities for involvement in the planning process, implementation of control strategies, and any other issues important to the area.
3. Interested stakeholders (i.e., local, state, and federal government, citizens, public interest groups, and the business community) will continue to be involved in the planning process as early as possible. Planning meetings will be open to the public, with posted meeting times and locations. Early action SIP drafts will be publicly available, and the drafting process will have sufficient opportunities for comment from all interested stakeholders.
4. Opportunities for public comment on the proposed early action SIP will be provided and will follow the traditional SIP revision process as implemented by DHEC.
5. Semi-annual reports detailing, at a minimum, progress toward key milestones, will be made available to the public.
6. DHEC has established and will maintain a website for South Carolina's Early Action Plan for the 8-hour ozone standard, located at [www.scdhec.net/baq/eap.html](http://www.scdhec.net/baq/eap.html).

**III. Local Government Responsibilities**

The local governments agree to develop and implement a local early action plan that will promote the area's attainment by December 31, 2007, of the 8-hour ozone standard and maintenance until at least 2012. The local governments will develop this plan in coordination with the DHEC, EPA, stakeholders and the public. The local early action plan will include a process to evaluate the effectiveness and maintain long-term compliance with the standard.

After all adopted Federal and State controls that have been or will be implemented by the attainment date of December 31, 2007, are accounted for in the modeling, the local area must adopt additional local controls, as necessary to demonstrate attainment of the 8-hour ozone standard by December 31, 2007. Local controls under consideration must be identified and described by June 16, 2003. These measures must be included in the semi-annual report made available to the public.

The draft local early action plan will be submitted to DHEC by August 31, 2003. The final local early action plan will be submitted to DHEC, with a copy forwarded to EPA, by March 31, 2004. The adopted local early action plan will be included in the early action SIP due December 31, 2004.

In the event a development or issue arises that may impact performance or progress toward key milestones (including if a key milestone will be or has been missed and/or if a termination or modification has been requested), the responsible party will notify all other signatories in writing as soon as possible.

#### **IV. The South Carolina Department of Health and Environmental Control**

DHEC agrees to develop and implement a state early action SIP that will demonstrate the participating area's attainment by December 31, 2007, of the 8-hour ozone standard and maintenance until at least 2012. DHEC will develop this plan in coordination with the local governments, EPA, stakeholders and the public. The state early action SIP will include a process to monitor and maintain long-term compliance with the standard.

It is the responsibility of each state under the CAA to ensure attainment with all National Ambient Air Quality Standards. At any such time that an area is deemed non-attainment, the state will be required to develop a plan to return the area(s) to attainment in accordance with the CAA. If applicable, South Carolina is committed to working with adjacent states to assure mutual attainment of national standards.

In the event a development or issue arises that may impact performance or progress toward key milestones (including if a key milestone will be or has been missed and/or if a termination or modification has been requested), DHEC will notify all other signatories in writing as soon as possible.

DHEC will provide support to areas throughout the planning and implementation process by:

1. Developing emission inventories, modeling, trend analysis, and quantification and comparison of control measures.
2. Providing necessary information on all federal and state adopted emission reduction measures, which affect the area.
3. Providing technical and strategic assistance, as appropriate, in the selection and implementation of control strategies.
4. Providing technical and planning assistance in developing and implementing processes to address the impact of emissions growth beyond the attainment date.
5. Maintaining monitors and reporting and analysis of monitoring data.
6. Promoting public awareness efforts.
7. Coordinating communication between local areas and the EPA to facilitate continuing the EPA review of local work.
8. Ensuring expeditious review of local early action plan(s), and if deemed adequate, proposing modification of the early action SIP to adopt the early action plan.

9. Adopting control measures into the early action SIP as expeditiously as possible. The final complete early action SIP revision must be completed, adopted, and submitted by the state to the EPA by December 31, 2004.
10. Tracking progress. If any milestone is missed and EPA withdraws the deferred effective date, thereby triggering a non-attainment designation and applicable statutory requirements, the state will strive to submit a traditional non-attainment SIP within one year. However, due to the South Carolina legislative review process, it may take at least eighteen months.
11. Working concurrently with areas not electing to participate in the early action SIP process in preparing the traditional SIP submittal as required by the CAA.


## **V. The Environmental Protection Agency**

The EPA will participate by:

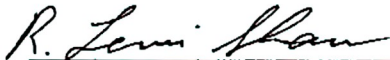
1. Recognizing the local area's and state's commitment to voluntarily adopt an early, substantive, enforceable, and scientifically-based attainment plan with early implementation of control measures by becoming a party to the EAC developed in conformance with South Carolina's Protocol for Early Action Compacts.
2. Providing technical assistance to the state(s) and local area(s) in the development of the early action plan.
3. Reviewing and approving the completed early action SIP by no later than September 30, 2005.
4. Deferring the effective date of non-attainment designation and related requirements for participating areas that fail to meet the 8-hour ozone standard as long as all terms and key milestones of the EAC are being met, including submission of the early action SIP revision by December 31, 2004.
5. Designating the area expeditiously as attainment and imposing no additional requirements, provided that the monitors in the area reflect attainment by December 31, 2007.
6. Taking action to withdraw the deferred effective date if the area violates the standard as of December 31, 2007, and the area has had the effective date of its non-attainment designation deferred. The area's non-attainment designation will become effective soon after.
7. Ensuring appropriate credit in the traditional SIP process for all emissions reductions from measures implemented in the early action SIP if the area does not meet all the terms of the EAC; including meeting agreed-upon key milestones and is designated (or re-designated if necessary) according to the EPA's 8-hour ozone implementation guidelines. The EPA will offer such an area no delays, exemptions, or other favorable treatment because of its participation in the EAC.

8. Not allowing any area to renew their EAC after December 31, 2007, or initiate a new compact if it has previously forfeited its participation.

VI. Signatures

  
United States Environmental Protection Agency

Regional Administrator 12-30-02  
Title Date

  
South Carolina  
Department of Health and Environmental Control

Deputy Commissioner 12/23/02  
Title Date

  
Kershaw County Representative

County Administration 12/23/02  
Title Date

**SOUTH CAROLINA'S 8-HOUR OZONE  
EARLY ACTION COMPACT**  
Lee County

The United States Environmental Protection Agency (EPA) has provided an option for areas currently meeting the 1-hour ozone standard, like those in South Carolina, to attain the 8-hour ozone standard by December 31, 2007, and obtain cleaner air sooner than federally mandated. This option offers a more expeditious time line for achieving emissions reductions than expected under the EPA's 8-hour ozone implementation rulemaking, while providing "fail-safe" provisions for the area to revert to the traditional State Implementation Plan (SIP) process if specific milestones are not met. Through the development of this Early Action Compact (EAC), local, state, and EPA officials agree to work together to develop and implement local and state early action plans. The plans will become a part of the state early action SIP to reduce ground-level ozone concentrations to comply with the 8-hour ozone standard by December 31, 2007, and maintain the standard beyond that date. Failure to meet the obligations outlined in this EAC will result in immediate reversion to the traditional non-attainment designation process as required in the Clean Air Act (CAA).

In an effort to provide this information to areas within South Carolina, the South Carolina Department of Health and Environmental Control (DHEC) held six public meetings throughout the state. The locations of the meetings were targeted to areas that could potentially be designated as non-attainment for the 8-hour ozone standard. The meetings were held in Columbia, Greenville, Florence, Rock Hill, Aiken and Charleston. EPA officials participated in five of the six meetings. The general public, local government representatives, industry representatives, and environmental interest groups attended the meetings. Prior to the meetings, DHEC issued a press release regarding the development of an early action SIP. Correspondence including a fact sheet was sent to all county administrators, Councils of Governments, Metropolitan Planning Organizations, public interest groups, industry representatives, other state agencies and others determined to be stakeholders in the process.

The Parties to this EAC are: Lee County, South Carolina Department of Health and Environmental Control (DHEC) and EPA.

**I. General Provisions**

- A. The parties commit to develop, implement and maintain the early action SIP (which includes the local early action plans) providing EPA defers the effective date of the non-attainment designation and related requirements as long as all conditions of the EAC and key milestones are met.
- B. If the potential area of non-attainment does not meet all the terms of the EAC, then it will forfeit its participation and will be subject to the full planning requirements under applicable CAA

traditional SIP processes including requirements defined as part of the EPA's 8-hour ozone implementation rulemaking.

- C. If the area has had the effective date of a non-attainment designation deferred and the area does not reach attainment of the standard by December 31, 2007, then the non-attainment designation will be effective. If the EPA's implementation schedule also requires a traditional SIP from areas on or before December 31, 2007, then a traditional SIP revision demonstrating attainment by the new attainment date will be due for the non-attainment area no later than December 31, 2008.
- D. Before formal adoption into the early action SIP, this agreement may be modified or terminated by mutual consent of all parties, or any party may withdraw from the agreement by notifying other parties in writing. If a party's withdrawal from the agreement prevents remaining signatories from satisfying any of the terms and milestones of the original agreement, the agreement will be void, any deferred effective date of the non-attainment designation would be withdrawn and the area's non-attainment designation would become effective soon after. Upon termination or withdrawal from the EAC, the area will be subject to the full planning requirements under applicable CAA traditional processes including requirements defined as part of the EPA's 8-hour ozone implementation rulemaking. The local government signatories will approve the local early action plans before submittal to DHEC for inclusion in the early action SIP. Once the local early action plan is incorporated into the early action SIP, any modifications will be treated as SIP revisions.
- E. Execution of this EAC by each Party shall be by signature of each Party's authorized representative. This agreement remains in effect until December 31, 2007.

## II. **Early Action Compact Requirements**

- A. **Milestones and Reporting**  
DHEC and local areas will assess progress towards developing and implementing the early action SIP and make a report available to EPA and the public every six months beginning in June 2003. As per EPA guidance, the key milestones for participation in the EAC are identified in the following table.

<b>Local Plan /Early Action SIP Milestones</b>		
<b>DATE</b>	<b>MILESTONE</b>	<b>RESPONSIBILITY</b>
<b>December 31, 2002</b>	EAC signed by all parties and submitted to EPA	Local/State/EPA
<b>June 16, 2003</b>	Discussion of control measures being considered to EPA	Local/State
<b>March 31, 2004</b>	Final local early action plan submitted to DHEC; copy to EPA	Local
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<b>April 1, 2005</b>	Local/State control strategies implemented no later than this date	Local/State
<b>September 30, 2005</b>	EPA takes final action on SIP submitted December 31, 2004	EPA
<b>June 30, 2006</b>	State submits progress report to EPA	State
<b>December 31, 2007</b>	Attainment of the 8-hour ozone standard	Local/State

B. Emissions Inventories

1. DHEC will be responsible for developing emissions inventories.
2. An initial modeling emissions inventory will be completed by December 31, 2002. This inventory includes:
  - a. Emissions modeling data for a 1998 episode that is representative of a typical ozone season exceedance that meets the EPA episode selection guidance;
  - b. MOBILE6 for determining on-road mobile emissions;
  - c. NONROAD model data; and,
  - d. Area source database utilizing population data allocated statewide.
3. A 2007 future year modeling emissions inventory will be developed by March 31, 2004. This inventory will sufficiently account for projected future growth in ozone precursor emissions through 2007, particularly from stationary, non-road and on-road mobile sources.
4. Additional inventories will be contingent upon legislative appropriations or other funding. Selection of specific episode inventories will be partially determined by the conceptual model, which reflects an analysis of meteorological conditions typical of high ozone events.
5. Emissions inventories will be compared and analyzed for trends in emission sources over time. The emissions inventory comparison and analysis will be completed by December 31, 2003.

C. Modeling

1. DHEC will be responsible for conducting the meteorological and air quality modeling analysis. DHEC will conduct the modeling analysis based on the "Draft Guidance on the use of Models and Other Analyses in Attainment Demonstrations for the 8-Hour Ozone NAAQS" (EPA-454/R-99-004, May 1999). The modeling will follow the guidance as facilitated by the EPA Regional Office.
2. Base case modeling will be completed by December 31, 2002. Future case modeling will be completed by October 31, 2003. One or more modeled control cases will be completed by January 31, 2004, with final revisions completed by March 31, 2004. All modeling will:
  - be SIP quality and perform within EPA's accepted margin of accuracy;
  - be carefully documented;
  - sufficiently account for projected future growth in ozone precursor emissions;
  - be accomplished by DHEC and reviewed by EPA; and,
  - be used to determine the effectiveness of NO<sub>x</sub> and/or VOC reductions. The control case(s) will be used to determine the relative effectiveness of different emission reduction strategies and to aid in the selection of appropriate emission reduction strategies.

D. Control Strategies

1. All adopted Federal and State control strategies that have been or will be implemented by the December 31, 2007, attainment date will be included in base, future and control case modeling.
2. Additional local and state control strategies under consideration will be identified by June 16, 2003. The local and state control strategies selected will be implemented as soon as practical, but no later than April 1, 2005.
3. Local and state control strategies will be specific, quantified, permanent and enforceable. The strategies will also include specific implementation dates and detailed documentation and reporting processes.
4. Voluntary strategies can play a supporting role in the local early action plan and the early action SIP. If emission reductions from voluntary strategies are quantified and credit is taken for them in the local early action plan or the early action SIP, those emission reductions will be enforceable. Additional strategies must be implemented to meet those quantified reduction requirements if quantified voluntary strategies fail. This is true for all quantified emission reductions.
5. Local and state control strategies will be designed and implemented with full stakeholder participation.

6. Local and state control strategies will be incorporated by DHEC into the early action SIP. In the event that the local area desires to add, delete or substitute strategies after early action SIP submittal, the local area will request a modification. Local early action plan modifications will be treated as SIP revisions and facilitated by DHEC.

E. Maintenance for Growth

1. The early action SIP will include a component to address emissions growth at least five years beyond December 31, 2007, ensuring that the areas will remain in attainment of the 8-hour ozone standard during that period. Attainment maintenance analysis will be completed by January 31, 2004, with final revisions completed by March 31, 2004. The analysis will employ one or more of the following or any other appropriate techniques necessary to make such a demonstration:
  - a. Modeling analysis showing ozone levels below the 8-hour ozone standard in 2012;
  - b. An annual review of growth (especially mobile and stationary source) to ensure control measures and growth assumptions are adequate;
  - c. Identification and quantification of federal, state, and/or local measures indicating sufficient reductions to offset growth estimates; or,
  - d. Any other appropriate techniques necessary to make such a determination.
2. The early action SIP must also detail a continuing planning process that includes modeling updates and modeling assumption verification (particularly growth assumptions). Modeling updates and planning processes must consider and evaluate the following:
  - a. All relevant actual new point sources;
  - b. Impacts from potential new source growth; and,
  - c. Future transportation patterns and their impact on air quality in a manner that is consistent with the most current adopted Long Range Transportation Plan and most current trend and projections of local motor vehicle emissions.
3. If the review of emissions growth in conjunction with the continuing planning process demonstrates that adopted emission reduction strategies are inadequate to address growth in emissions, additional measures will be added to the early action plan. Local planning processes should prepare for this possibility.
4. In the event that the continuing planning process identifies the need to add, delete, or substitute control strategies after the local early action plan has been incorporated into the early action SIP, the local area will initiate, and DHEC will facilitate a SIP revision to accommodate changes.

**F. Public Involvement**

1. Public involvement has been and will continue to be strongly encouraged during the planning and implementation process.
2. Public awareness programs will be used to provide opportunities for involvement in the planning process, implementation of control strategies, and any other issues important to the area.
3. Interested stakeholders (i.e., local, state, and federal government, citizens, public interest groups, and the business community) will continue to be involved in the planning process as early as possible. Planning meetings will be open to the public, with posted meeting times and locations. Early action SIP drafts will be publicly available, and the drafting process will have sufficient opportunities for comment from all interested stakeholders.
4. Opportunities for public comment on the proposed early action SIP will be provided and will follow the traditional SIP revision process as implemented by DHEC.
5. Semi-annual reports detailing, at a minimum, progress toward key milestones, will be made available to the public.
6. DHEC has established and will maintain a website for South Carolina's Early Action Plan for the 8-hour ozone standard, located at [www.scdhec.net/baq/eap.html](http://www.scdhec.net/baq/eap.html).

**III. Local Government Responsibilities**

The local governments agree to develop and implement a local early action plan that will promote the area's attainment by December 31, 2007, of the 8-hour ozone standard and maintenance until at least 2012. The local governments will develop this plan in coordination with the DHEC, EPA, stakeholders and the public. The local early action plan will include a process to evaluate the effectiveness and maintain long-term compliance with the standard.

After all adopted Federal and State controls that have been or will be implemented by the attainment date of December 31, 2007, are accounted for in the modeling, the local area must adopt additional local controls, as necessary to demonstrate attainment of the 8-hour ozone standard by December 31, 2007. Local controls under consideration must be identified and described by June 16, 2003. These measures must be included in the semi-annual report made available to the public.

The draft local early action plan will be submitted to DHEC by August 31, 2003. The final local early action plan will be submitted to DHEC, with a copy forwarded to EPA, by March 31, 2004. The adopted local early action plan will be included in the early action SIP due December 31, 2004.

In the event a development or issue arises that may impact performance or progress toward key milestones (including if a key milestone will be or has been missed and/or if a termination or modification has been requested), the responsible party will notify all other signatories in writing as soon as possible.

#### **IV. The South Carolina Department of Health and Environmental Control**

DHEC agrees to develop and implement a state early action SIP that will demonstrate the participating area's attainment by December 31, 2007, of the 8-hour ozone standard and maintenance until at least 2012. DHEC will develop this plan in coordination with the local governments, EPA, stakeholders and the public. The state early action SIP will include a process to monitor and maintain long-term compliance with the standard.

It is the responsibility of each state under the CAA to ensure attainment with all National Ambient Air Quality Standards. At any such time that an area is deemed non-attainment, the state will be required to develop a plan to return the area(s) to attainment in accordance with the CAA. If applicable, South Carolina is committed to working with adjacent states to assure mutual attainment of national standards.

In the event a development or issue arises that may impact performance or progress toward key milestones (including if a key milestone will be or has been missed and/or if a termination or modification has been requested), DHEC will notify all other signatories in writing as soon as possible.

DHEC will provide support to areas throughout the planning and implementation process by:

1. Developing emission inventories, modeling, trend analysis, and quantification and comparison of control measures.
2. Providing necessary information on all federal and state adopted emission reduction measures, which affect the area.
3. Providing technical and strategic assistance, as appropriate, in the selection and implementation of control strategies.
4. Providing technical and planning assistance in developing and implementing processes to address the impact of emissions growth beyond the attainment date.
5. Maintaining monitors and reporting and analysis of monitoring data.
6. Promoting public awareness efforts.
7. Coordinating communication between local areas and the EPA to facilitate continuing the EPA review of local work.
8. Ensuring expeditious review of local early action plan(s), and if deemed adequate, proposing modification of the early action SIP to adopt the early action plan.

9. Adopting control measures into the early action SIP as expeditiously as possible. The final complete early action SIP revision must be completed, adopted, and submitted by the state to the EPA by December 31, 2004.
10. Tracking progress. If any milestone is missed and EPA withdraws the deferred effective date, thereby triggering a non-attainment designation and applicable statutory requirements, the state will strive to submit a traditional non-attainment SIP within one year. However, due to the South Carolina legislative review process, it may take at least eighteen months.
11. Working concurrently with areas not electing to participate in the early action SIP process in preparing the traditional SIP submittal as required by the CAA.

## **V. The Environmental Protection Agency**

The EPA will participate by:

1. Recognizing the local area's and state's commitment to voluntarily adopt an early, substantive, enforceable, and scientifically-based attainment plan with early implementation of control measures by becoming a party to the EAC developed in conformance with South Carolina's Protocol for Early Action Compacts.
2. Providing technical assistance to the state(s) and local area(s) in the development of the early action plan.
3. Reviewing and approving the completed early action SIP by no later than September 30, 2005.
4. Deferring the effective date of non-attainment designation and related requirements for participating areas that fail to meet the 8-hour ozone standard as long as all terms and key milestones of the EAC are being met, including submission of the early action SIP revision by December 31, 2004.
5. Designating the area expeditiously as attainment and imposing no additional requirements, provided that the monitors in the area reflect attainment by December 31, 2007.
6. Taking action to withdraw the deferred effective date if the area violates the standard as of December 31, 2007, and the area has had the effective date of its non-attainment designation deferred. The area's non-attainment designation will become effective soon after.
7. Ensuring appropriate credit in the traditional SIP process for all emissions reductions from measures implemented in the early action SIP if the area does not meet all the terms of the EAC; including meeting agreed-upon key milestones and is designated (or re-designated if necessary) according to the EPA's 8-hour ozone implementation guidelines. The EPA will offer such an area no delays, exemptions, or other favorable treatment because of its participation in the EAC.

8. Not allowing any area to renew their EAC after December 31, 2007, or initiate a new compact if it has previously forfeited its participation.

VI. Signatures

  
United States Environmental Protection Agency

Regional Administrator 12-30-02  
Title Date

R. Linn Han  
South Carolina  
Department of Health and Environmental Control

Deputy Commissioner 12/20/02  
Title Date

Sam M. LaBate  
Lee County Representative Title

ADMINISTRATOR 12/20/02  
Date

**SOUTH CAROLINA'S 8-HOUR OZONE  
EARLY ACTION COMPACT**  
Sumter County

The United States Environmental Protection Agency (EPA) has provided an option for areas currently meeting the 1-hour ozone standard, like those in South Carolina, to attain the 8-hour ozone standard by December 31, 2007, and obtain cleaner air sooner than federally mandated. This option offers a more expeditious time line for achieving emissions reductions than expected under the EPA's 8-hour ozone implementation rulemaking, while providing "fail-safe" provisions for the area to revert to the traditional State Implementation Plan (SIP) process if specific milestones are not met. Through the development of this Early Action Compact (EAC), local, state, and EPA officials agree to work together to develop and implement local and state early action plans. The plans will become a part of the state early action SIP to reduce ground-level ozone concentrations to comply with the 8-hour ozone standard by December 31, 2007, and maintain the standard beyond that date. Failure to meet the obligations outlined in this EAC will result in immediate reversion to the traditional non-attainment designation process as required in the Clean Air Act (CAA).

In an effort to provide this information to areas within South Carolina, the South Carolina Department of Health and Environmental Control (DHEC) held six public meetings throughout the state. The locations of the meetings were targeted to areas that could potentially be designated as non-attainment for the 8-hour ozone standard. The meetings were held in Columbia, Greenville, Florence, Rock Hill, Aiken and Charleston. EPA officials participated in five of the six meetings. The general public, local government representatives, industry representatives, and environmental interest groups attended the meetings. Prior to the meetings, DHEC issued a press release regarding the development of an early action SIP. Correspondence including a fact sheet was sent to all county administrators, Councils of Governments, Metropolitan Planning Organizations, public interest groups, industry representatives, other state agencies and others determined to be stakeholders in the process.

The Parties to this EAC are: Sumter County, South Carolina Department of Health and Environmental Control (DHEC) and EPA.

**I. General Provisions**

- A. The parties commit to develop, implement and maintain the early action SIP (which includes the local early action plans) providing EPA defers the effective date of the non-attainment designation and related requirements as long as all conditions of the EAC and key milestones are met.
- B. If the potential area of non-attainment does not meet all the terms of the EAC, then it will forfeit its participation and will be subject to the full planning requirements under applicable CAA

traditional SIP processes including requirements defined as part of the EPA's 8-hour ozone implementation rulemaking.

- C. If the area has had the effective date of a non-attainment designation deferred and the area does not reach attainment of the standard by December 31, 2007, then the non-attainment designation will be effective. If the EPA's implementation schedule also requires a traditional SIP from areas on or before December 31, 2007, then a traditional SIP revision demonstrating attainment by the new attainment date will be due for the non-attainment area no later than December 31, 2008.
- D. Before formal adoption into the early action SIP, this agreement may be modified or terminated by mutual consent of all parties, or any party may withdraw from the agreement by notifying other parties in writing. If a party's withdrawal from the agreement prevents remaining signatories from satisfying any of the terms and milestones of the original agreement, the agreement will be void, any deferred effective date of the non-attainment designation would be withdrawn and the area's non-attainment designation would become effective soon after. Upon termination or withdrawal from the EAC, the area will be subject to the full planning requirements under applicable CAA traditional processes including requirements defined as part of the EPA's 8-hour ozone implementation rulemaking. The local government signatories will approve the local early action plans before submittal to DHEC for inclusion in the early action SIP. Once the local early action plan is incorporated into the early action SIP, any modifications will be treated as SIP revisions.
- E. Execution of this EAC by each Party shall be by signature of each Party's authorized representative. This agreement remains in effect until December 31, 2007.

## II. **Early Action Compact Requirements**

- A. **Milestones and Reporting**  
DHEC and local areas will assess progress towards developing and implementing the early action SIP and make a report available to EPA and the public every six months beginning in June 2003. As per EPA guidance, the key milestones for participation in the EAC are identified in the following table.

<b>Local Plan /Early Action SIP Milestones</b>		
<b>DATE</b>	<b>MILESTONE</b>	<b>RESPONSIBILITY</b>
<b>December 31, 2002</b>	EAC signed by all parties and submitted to EPA	Local/State/EPA
<b>June 16, 2003</b>	Discussion of control measures being considered to EPA	Local/State
<b>March 31, 2004</b>	Final local early action plan submitted to DHEC; copy to EPA	Local
<b>December 31, 2004</b>	Early Action State Implementation Plan submitted to EPA for incorporation into SIP	State
<b>April 1, 2005</b>	Local/State control strategies implemented no later than this date	Local/State
<b>September 30, 2005</b>	EPA takes final action on SIP submitted December 31, 2004	EPA
<b>June 30, 2006</b>	State submits progress report to EPA	State
<b>December 31, 2007</b>	Attainment of the 8-hour ozone standard	Local/State

B. Emissions Inventories

1. DHEC will be responsible for developing emissions inventories.
2. An initial modeling emissions inventory will be completed by December 31, 2002. This inventory includes:
  - a. Emissions modeling data for a 1998 episode that is representative of a typical ozone season exceedance that meets the EPA episode selection guidance;
  - b. MOBILE6 for determining on-road mobile emissions;
  - c. NONROAD model data; and,
  - d. Area source database utilizing population data allocated statewide.
3. A 2007 future year modeling emissions inventory will be developed by March 31, 2004. This inventory will sufficiently account for projected future growth in ozone precursor emissions through 2007, particularly from stationary, non-road and on-road mobile sources.
4. Additional inventories will be contingent upon legislative appropriations or other funding. Selection of specific episode inventories will be partially determined by the conceptual model, which reflects an analysis of meteorological conditions typical of high ozone events.
5. Emissions inventories will be compared and analyzed for trends in emission sources over time. The emissions inventory comparison and analysis will be completed by December 31, 2003.

C. Modeling

1. DHEC will be responsible for conducting the meteorological and air quality modeling analysis. DHEC will conduct the modeling analysis based on the "Draft Guidance on the use of Models and Other Analyses in Attainment Demonstrations for the 8-Hour Ozone NAAQS" (EPA-454/R-99-004, May 1999). The modeling will follow the guidance as facilitated by the EPA Regional Office.
2. Base case modeling will be completed by December 31, 2002. Future case modeling will be completed by October 31, 2003. One or more modeled control cases will be completed by January 31, 2004, with final revisions completed by March 31, 2004. All modeling will:
  - be SIP quality and perform within EPA's accepted margin of accuracy;
  - be carefully documented;
  - sufficiently account for projected future growth in ozone precursor emissions;
  - be accomplished by DHEC and reviewed by EPA; and,
  - be used to determine the effectiveness of NO<sub>x</sub> and/or VOC reductions. The control case(s) will be used to determine the relative effectiveness of different emission reduction strategies and to aid in the selection of appropriate emission reduction strategies.

D. Control Strategies

1. All adopted Federal and State control strategies that have been or will be implemented by the December 31, 2007, attainment date will be included in base, future and control case modeling.
2. Additional local and state control strategies under consideration will be identified by June 16, 2003. The local and state control strategies selected will be implemented as soon as practical, but no later than April 1, 2005.
3. Local and state control strategies will be specific, quantified, permanent and enforceable. The strategies will also include specific implementation dates and detailed documentation and reporting processes.
4. Voluntary strategies can play a supporting role in the local early action plan and the early action SIP. If emission reductions from voluntary strategies are quantified and credit is taken for them in the local early action plan or the early action SIP, those emission reductions will be enforceable. Additional strategies must be implemented to meet those quantified reduction requirements if quantified voluntary strategies fail. This is true for all quantified emission reductions.
5. Local and state control strategies will be designed and implemented with full stakeholder participation.

6. Local and state control strategies will be incorporated by DHEC into the early action SIP. In the event that the local area desires to add, delete or substitute strategies after early action SIP submittal, the local area will request a modification. Local early action plan modifications will be treated as SIP revisions and facilitated by DHEC.

E. Maintenance for Growth

1. The early action SIP will include a component to address emissions growth at least five years beyond December 31, 2007, ensuring that the areas will remain in attainment of the 8-hour ozone standard during that period. Attainment maintenance analysis will be completed by January 31, 2004, with final revisions completed by March 31, 2004. The analysis will employ one or more of the following or any other appropriate techniques necessary to make such a demonstration:
  - a. Modeling analysis showing ozone levels below the 8-hour ozone standard in 2012;
  - b. An annual review of growth (especially mobile and stationary source) to ensure control measures and growth assumptions are adequate;
  - c. Identification and quantification of federal, state, and/or local measures indicating sufficient reductions to offset growth estimates; or,
  - d. Any other appropriate techniques necessary to make such a determination.
2. The early action SIP must also detail a continuing planning process that includes modeling updates and modeling assumption verification (particularly growth assumptions). Modeling updates and planning processes must consider and evaluate the following:
  - a. All relevant actual new point sources;
  - b. Impacts from potential new source growth; and,
  - c. Future transportation patterns and their impact on air quality in a manner that is consistent with the most current adopted Long Range Transportation Plan and most current trend and projections of local motor vehicle emissions.
3. If the review of emissions growth in conjunction with the continuing planning process demonstrates that adopted emission reduction strategies are inadequate to address growth in emissions, additional measures will be added to the early action plan. Local planning processes should prepare for this possibility.
4. In the event that the continuing planning process identifies the need to add, delete, or substitute control strategies after the local early action plan has been incorporated into the early action SIP, the local area will initiate, and DHEC will facilitate a SIP revision to accommodate changes.

**F. Public Involvement**

1. Public involvement has been and will continue to be strongly encouraged during the planning and implementation process.
2. Public awareness programs will be used to provide opportunities for involvement in the planning process, implementation of control strategies, and any other issues important to the area.
3. Interested stakeholders (i.e., local, state, and federal government, citizens, public interest groups, and the business community) will continue to be involved in the planning process as early as possible. Planning meetings will be open to the public, with posted meeting times and locations. Early action SIP drafts will be publicly available, and the drafting process will have sufficient opportunities for comment from all interested stakeholders.
4. Opportunities for public comment on the proposed early action SIP will be provided and will follow the traditional SIP revision process as implemented by DHEC.
5. Semi-annual reports detailing, at a minimum, progress toward key milestones, will be made available to the public.
6. DHEC has established and will maintain a website for South Carolina's Early Action Plan for the 8-hour ozone standard, located at [www.scdhec.net/baq/eap.html](http://www.scdhec.net/baq/eap.html).

**III. Local Government Responsibilities**

The local governments agree to develop and implement a local early action plan that will promote the area's attainment by December 31, 2007, of the 8-hour ozone standard and maintenance until at least 2012. The local governments will develop this plan in coordination with the DHEC, EPA, stakeholders and the public. The local early action plan will include a process to evaluate the effectiveness and maintain long-term compliance with the standard.

After all adopted Federal and State controls that have been or will be implemented by the attainment date of December 31, 2007, are accounted for in the modeling, the local area must adopt additional local controls, as necessary to demonstrate attainment of the 8-hour ozone standard by December 31, 2007. Local controls under consideration must be identified and described by June 16, 2003. These measures must be included in the semi-annual report made available to the public.

The draft local early action plan will be submitted to DHEC by August 31, 2003. The final local early action plan will be submitted to DHEC, with a copy forwarded to EPA, by March 31, 2004. The adopted local early action plan will be included in the early action SIP due December 31, 2004.

In the event a development or issue arises that may impact performance or progress toward key milestones (including if a key milestone will be or has been missed and/or if a termination or modification has been requested), the responsible party will notify all other signatories in writing as soon as possible.

#### **IV. The South Carolina Department of Health and Environmental Control**

DHEC agrees to develop and implement a state early action SIP that will demonstrate the participating area's attainment by December 31, 2007, of the 8-hour ozone standard and maintenance until at least 2012. DHEC will develop this plan in coordination with the local governments, EPA, stakeholders and the public. The state early action SIP will include a process to monitor and maintain long-term compliance with the standard.

It is the responsibility of each state under the CAA to ensure attainment with all National Ambient Air Quality Standards. At any such time that an area is deemed non-attainment, the state will be required to develop a plan to return the area(s) to attainment in accordance with the CAA. If applicable, South Carolina is committed to working with adjacent states to assure mutual attainment of national standards.

In the event a development or issue arises that may impact performance or progress toward key milestones (including if a key milestone will be or has been missed and/or if a termination or modification has been requested), DHEC will notify all other signatories in writing as soon as possible.

DHEC will provide support to areas throughout the planning and implementation process by:

1. Developing emission inventories, modeling, trend analysis, and quantification and comparison of control measures.
2. Providing necessary information on all federal and state adopted emission reduction measures, which affect the area.
3. Providing technical and strategic assistance, as appropriate, in the selection and implementation of control strategies.
4. Providing technical and planning assistance in developing and implementing processes to address the impact of emissions growth beyond the attainment date.
5. Maintaining monitors and reporting and analysis of monitoring data.
6. Promoting public awareness efforts.
7. Coordinating communication between local areas and the EPA to facilitate continuing the EPA review of local work.
8. Ensuring expeditious review of local early action plan(s), and if deemed adequate, proposing modification of the early action SIP to adopt the early action plan.

9. Adopting control measures into the early action SIP as expeditiously as possible. The final complete early action SIP revision must be completed, adopted, and submitted by the state to the EPA by December 31, 2004.
10. Tracking progress. If any milestone is missed and EPA withdraws the deferred effective date, thereby triggering a non-attainment designation and applicable statutory requirements, the state will strive to submit a traditional non-attainment SIP within one year. However, due to the South Carolina legislative review process, it may take at least eighteen months.
11. Working concurrently with areas not electing to participate in the early action SIP process in preparing the traditional SIP submittal as required by the CAA.

## **V. The Environmental Protection Agency**

The EPA will participate by:

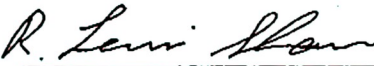
1. Recognizing the local area's and state's commitment to voluntarily adopt an early, substantive, enforceable, and scientifically-based attainment plan with early implementation of control measures by becoming a party to the EAC developed in conformance with South Carolina's Protocol for Early Action Compacts.
2. Providing technical assistance to the state(s) and local area(s) in the development of the early action plan.
3. Reviewing and approving the completed early action SIP by no later than September 30, 2005.
4. Deferring the effective date of non-attainment designation and related requirements for participating areas that fail to meet the 8-hour ozone standard as long as all terms and key milestones of the EAC are being met, including submission of the early action SIP revision by December 31, 2004.
5. Designating the area expeditiously as attainment and imposing no additional requirements, provided that the monitors in the area reflect attainment by December 31, 2007.
6. Taking action to withdraw the deferred effective date if the area violates the standard as of December 31, 2007, and the area has had the effective date of its non-attainment designation deferred. The area's non-attainment designation will become effective soon after.
7. Ensuring appropriate credit in the traditional SIP process for all emissions reductions from measures implemented in the early action SIP if the area does not meet all the terms of the EAC; including meeting agreed-upon key milestones and is designated (or re-designated if necessary) according to the EPA's 8-hour ozone implementation guidelines. The EPA will offer such an area no delays, exemptions, or other favorable treatment because of its participation in the EAC.

8. Not allowing any area to renew their EAC after December 31, 2007, or initiate a new compact if it has previously forfeited its participation.

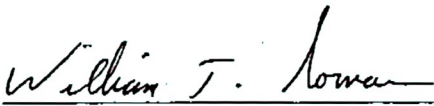
VI. Signatures

  
United States Environmental Protection Agency

Regional Administrator 12-30-02  
Title Date

  
South Carolina  
Department of Health and Environmental Control

Deputy Commissioner 12/20/02  
Title Date

  
Sumter County Representative

County Administrator 12-16-02  
Title Date

# **Upper Savannah Area**

## **Local Early Action Compacts**

**December 2002**



**SOUTH CAROLINA'S 8-HOUR OZONE  
EARLY ACTION COMPACT  
Abbeville County**

The United States Environmental Protection Agency (EPA) has provided an option for areas currently meeting the 1-hour ozone standard, like those in South Carolina, to attain the 8-hour ozone standard by December 31, 2007, and obtain cleaner air sooner than federally mandated. This option offers a more expeditious time line for achieving emissions reductions than expected under the EPA's 8-hour ozone implementation rulemaking, while providing "fail-safe" provisions for the area to revert to the traditional State Implementation Plan (SIP) process if specific milestones are not met. Through the development of this Early Action Compact (EAC), local, state, and EPA officials agree to work together to develop and implement local and state early action plans. The plans will become a part of the state early action SIP to reduce ground-level ozone concentrations to comply with the 8-hour ozone standard by December 31, 2007, and maintain the standard beyond that date. Failure to meet the obligations outlined in this EAC will result in immediate reversion to the traditional non-attainment designation process as required in the Clean Air Act (CAA).

In an effort to provide this information to areas within South Carolina, the South Carolina Department of Health and Environmental Control (DHEC) held six public meetings throughout the state. The locations of the meetings were targeted to areas that could potentially be designated as non-attainment for the 8-hour ozone standard. The meetings were held in Columbia, Greenville, Florence, Rock Hill, Aiken and Charleston. EPA officials participated in five of the six meetings. The general public, local government representatives, industry representatives, and environmental interest groups attended the meetings. Prior to the meetings, DHEC issued a press release regarding the development of an early action SIP. Correspondence including a fact sheet was sent to all county administrators, Councils of Governments, Metropolitan Planning Organizations, public interest groups, industry representatives, other state agencies and others determined to be stakeholders in the process.

The Parties to this (EAC) are: Abbeville County, South Carolina Department of Health and Environmental Control (DHEC) and EPA.

**I. General Provisions**

- A. The parties commit to develop, implement and maintain the early action SIP (which includes the local early action plans) providing EPA defers the effective date of the non-attainment designation and related requirements as long as all conditions of the EAC and key milestones are met.
- B. If the potential area of non-attainment does not meet all the terms of the EAC, then it will forfeit its participation and will be subject to the full planning requirements under applicable CAA

traditional SIP processes including requirements defined as part of the EPA's 8-hour ozone implementation rulemaking.

- C. If the area has had the effective date of a non-attainment designation deferred and the area does not reach attainment of the standard by December 31, 2007, then the non-attainment designation will be effective. If the EPA's implementation schedule also requires a traditional SIP from areas on or before December 31, 2007, then a traditional SIP revision demonstrating attainment by the new attainment date will be due for the non-attainment area no later than December 31, 2008.
- D. Before formal adoption into the early action SIP, this agreement may be modified or terminated by mutual consent of all parties, or any party may withdraw from the agreement by notifying other parties in writing. If a party's withdrawal from the agreement prevents remaining signatories from satisfying any of the terms and milestones of the original agreement, the agreement will be void, any deferred effective date of the non-attainment designation would be withdrawn and the area's non-attainment designation would become effective soon after. Upon termination or withdrawal from the EAC, the area will be subject to the full planning requirements under applicable CAA traditional processes including requirements defined as part of the EPA's 8-hour ozone implementation rulemaking. The local government signatories will approve the local early action plans before submittal to DHEC for inclusion in the early action SIP. Once the local early action plan is incorporated into the early action SIP, any modifications will be treated as SIP revisions.
- E. Execution of this EAC by each Party shall be by signature of each Party's authorized representative. This agreement remains in effect until December 31, 2007.

## II. **Early Action Compact Requirements**

- A. **Milestones and Reporting**  
DHEC and local areas will assess progress towards developing and implementing the early action SIP and make a report available to EPA and the public every six months beginning in June 2003. As per EPA guidance, the key milestones for participation in the EAC are identified in the following table.

<b>Local Plan /Early Action SIP Milestones</b>		
<b>DATE</b>	<b>MILESTONE</b>	<b>RESPONSIBILITY</b>
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<b>June 16, 2003</b>	Discussion of control measures being considered to EPA	Local/State
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<b>April 1, 2005</b>	Local/State control strategies implemented no later than this date	Local/State
<b>September 30, 2005</b>	EPA takes final action on SIP submitted December 31, 2004	EPA
<b>June 30, 2006</b>	State submits progress report to EPA	State
<b>December 31, 2007</b>	Attainment of the 8-hour ozone standard	Local/State

B. Emissions Inventories

1. DHEC will be responsible for developing emissions inventories.
2. An initial modeling emissions inventory will be completed by December 31, 2002. This inventory includes:
  - a. Emissions modeling data for a 1998 episode that is representative of a typical ozone season exceedance that meets the EPA episode selection guidance;
  - b. MOBILE6 for determining on-road mobile emissions;
  - c. NONROAD model data; and,
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3. A 2007 future year modeling emissions inventory will be developed by March 31, 2004. This inventory will sufficiently account for projected future growth in ozone precursor emissions through 2007, particularly from stationary, non-road and on-road mobile sources.
4. Additional inventories will be contingent upon legislative appropriations or other funding. Selection of specific episode inventories will be partially determined by the conceptual model, which reflects an analysis of meteorological conditions typical of high ozone events.
5. Emissions inventories will be compared and analyzed for trends in emission sources over time. The emissions inventory comparison and analysis will be completed by December 31, 2003.

C. Modeling

1. DHEC will be responsible for conducting the meteorological and air quality modeling analysis. DHEC will conduct the modeling analysis based on the "Draft Guidance on the use of Models and Other Analyses in Attainment Demonstrations for the 8-Hour Ozone NAAQS" (EPA-454/R-99-004, May 1999). The modeling will follow the guidance as facilitated by the EPA Regional Office.
2. Base case modeling will be completed by December 31, 2002. Future case modeling will be completed by October 31, 2003. One or more modeled control cases will be completed by January 31, 2004, with final revisions completed by March 31, 2004. All modeling will:
  - be SIP quality and perform within EPA's accepted margin of accuracy;
  - be carefully documented;
  - sufficiently account for projected future growth in ozone precursor emissions;
  - be accomplished by DHEC and reviewed by EPA; and,
  - be used to determine the effectiveness of NO<sub>x</sub> and/or VOC reductions. The control case(s) will be used to determine the relative effectiveness of different emission reduction strategies and to aid in the selection of appropriate emission reduction strategies.

D. Control Strategies

1. All adopted Federal and State control strategies that have been or will be implemented by the December 31, 2007, attainment date will be included in base, future and control case modeling.
2. Additional local and state control strategies under consideration will be identified by June 16, 2003. The local and state control strategies selected will be implemented as soon as practical, but no later than April 1, 2005.
3. Local and state control strategies will be specific, quantified, permanent and enforceable. The strategies will also include specific implementation dates and detailed documentation and reporting processes.
4. Voluntary strategies can play a supporting role in the local early action plan and the early action SIP. If emission reductions from voluntary strategies are quantified and credit is taken for them in the local early action plan or the early action SIP, those emission reductions will be enforceable. Additional strategies must be implemented to meet those quantified reduction requirements if quantified voluntary strategies fail. This is true for all quantified emission reductions.
5. Local and state control strategies will be designed and implemented with full stakeholder participation.

6. Local and state control strategies will be incorporated by DHEC into the early action SIP. In the event that the local area desires to add, delete or substitute strategies after early action SIP submittal, the local area will request a modification. Local early action plan modifications will be treated as SIP revisions and facilitated by DHEC.

E. Maintenance for Growth

1. The early action SIP will include a component to address emissions growth at least five years beyond December 31, 2007, ensuring that the areas will remain in attainment of the 8-hour ozone standard during that period. Attainment maintenance analysis will be completed by January 31, 2004, with final revisions completed by March 31, 2004. The analysis will employ one or more of the following or any other appropriate techniques necessary to make such a demonstration:
  - a. Modeling analysis showing ozone levels below the 8-hour ozone standard in 2012;
  - b. An annual review of growth (especially mobile and stationary source) to ensure control measures and growth assumptions are adequate;
  - c. Identification and quantification of federal, state, and/or local measures indicating sufficient reductions to offset growth estimates; or,
  - d. Any other appropriate techniques necessary to make such a determination.
2. The early action SIP must also detail a continuing planning process that includes modeling updates and modeling assumption verification (particularly growth assumptions). Modeling updates and planning processes must consider and evaluate the following:
  - a. All relevant actual new point sources;
  - b. Impacts from potential new source growth; and,
  - c. Future transportation patterns and their impact on air quality in a manner that is consistent with the most current adopted Long Range Transportation Plan and most current trend and projections of local motor vehicle emissions.
3. If the review of emissions growth in conjunction with the continuing planning process demonstrates that adopted emission reduction strategies are inadequate to address growth in emissions, additional measures will be added to the early action plan. Local planning processes should prepare for this possibility.
4. In the event that the continuing planning process identifies the need to add, delete, or substitute control strategies after the local early action plan has been incorporated into the early action SIP, the local area will initiate, and DHEC will facilitate a SIP revision to accommodate changes.

F. Public Involvement

1. Public involvement has been and will continue to be strongly encouraged during the planning and implementation process.
2. Public awareness programs will be used to provide opportunities for involvement in the planning process, implementation of control strategies, and any other issues important to the area.
3. Interested stakeholders (i.e., local, state, and federal government, citizens, public interest groups, and the business community) will continue to be involved in the planning process as early as possible. Planning meetings will be open to the public, with posted meeting times and locations. Early action SIP drafts will be publicly available, and the drafting process will have sufficient opportunities for comment from all interested stakeholders.
4. Opportunities for public comment on the proposed early action SIP will be provided and will follow the traditional SIP revision process as implemented by DHEC.
5. Semi-annual reports detailing, at a minimum, progress toward key milestones, will be made available to the public.
6. DHEC has established and will maintain a website for South Carolina's Early Action Plan for the 8-hour ozone standard, located at [www.scdhec.net/baq/eap.html](http://www.scdhec.net/baq/eap.html).

**III. Local Government Responsibilities**

The local governments agree to develop and implement a local early action plan that will promote the area's attainment by December 31, 2007, of the 8-hour ozone standard and maintenance until at least 2012. The local governments will develop this plan in coordination with the DHEC, EPA, stakeholders and the public. The local early action plan will include a process to evaluate the effectiveness and maintain long-term compliance with the standard.

After all adopted Federal and State controls that have been or will be implemented by the attainment date of December 31, 2007, are accounted for in the modeling, the local area must adopt additional local controls, as necessary to demonstrate attainment of the 8-hour ozone standard by December 31, 2007. Local controls under consideration must be identified and described by June 16, 2003. These measures must be included in the semi-annual report made available to the public.

The draft local early action plan will be submitted to DHEC by August 31, 2003. The final local early action plan will be submitted to DHEC, with a copy forwarded to EPA, by March 31, 2004. The adopted local early action plan will be included in the early action SIP due December 31, 2004.

In the event a development or issue arises that may impact performance or progress toward key milestones (including if a key milestone will be or has been missed and/or if a termination or modification has been requested), the responsible party will notify all other signatories in writing as soon as possible.

#### **IV. The South Carolina Department of Health and Environmental Control**

DHEC agrees to develop and implement a state early action SIP that will demonstrate the participating area's attainment by December 31, 2007, of the 8-hour ozone standard and maintenance until at least 2012. DHEC will develop this plan in coordination with the local governments, EPA, stakeholders and the public. The state early action SIP will include a process to monitor and maintain long-term compliance with the standard.

It is the responsibility of each state under the CAA to ensure attainment with all National Ambient Air Quality Standards. At any such time that an area is deemed non-attainment, the state will be required to develop a plan to return the area(s) to attainment in accordance with the CAA. If applicable, South Carolina is committed to working with adjacent states to assure mutual attainment of national standards.

In the event a development or issue arises that may impact performance or progress toward key milestones (including if a key milestone will be or has been missed and/or if a termination or modification has been requested), DHEC will notify all other signatories in writing as soon as possible.

DHEC will provide support to areas throughout the planning and implementation process by:

1. Developing emission inventories, modeling, trend analysis, and quantification and comparison of control measures.
2. Providing necessary information on all federal and state adopted emission reduction measures, which affect the area.
3. Providing technical and strategic assistance, as appropriate, in the selection and implementation of control strategies.
4. Providing technical and planning assistance in developing and implementing processes to address the impact of emissions growth beyond the attainment date.
5. Maintaining monitors and reporting and analysis of monitoring data.
6. Promoting public awareness efforts.
7. Coordinating communication between local areas and the EPA to facilitate continuing the EPA review of local work.
8. Ensuring expeditious review of local early action plan(s), and if deemed adequate, proposing modification of the early action SIP to adopt the early action plan.

9. Adopting control measures into the early action SIP as expeditiously as possible. The final complete early action SIP revision must be completed, adopted, and submitted by the state to the EPA by December 31, 2004.
10. Tracking progress. If any milestone is missed and EPA withdraws the deferred effective date, thereby triggering a non-attainment designation and applicable statutory requirements, the state will strive to submit a traditional non-attainment SIP within one year. However, due to the South Carolina legislative review process, it may take at least eighteen months.
11. Working concurrently with areas not electing to participate in the early action SIP process in preparing the traditional SIP submittal as required by the CAA.

## **V. The Environmental Protection Agency**

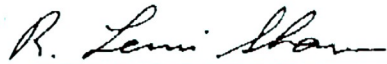
The EPA will participate by:

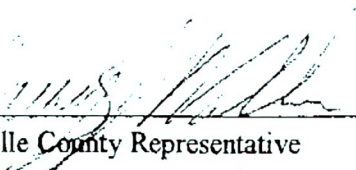
1. Recognizing the local area's and state's commitment to voluntarily adopt an early, substantive, enforceable, and scientifically-based attainment plan with early implementation of control measures by becoming a party to the EAC developed in conformance with South Carolina's Protocol for Early Action Compacts.
2. Providing technical assistance to the state(s) and local area(s) in the development of the early action plan.
3. Reviewing and approving the completed early action SIP by no later than September 30, 2005.
4. Deferring the effective date of non-attainment designation and related requirements for participating areas that fail to meet the 8-hour ozone standard as long as all terms and key milestones of the EAC are being met, including submission of the early action SIP revision by December 31, 2004.
5. Designating the area expeditiously as attainment and imposing no additional requirements, provided that the monitors in the area reflect attainment by December 31, 2007.
6. Taking action to withdraw the deferred effective date if the area violates the standard as of December 31, 2007, and the area has had the effective date of its non-attainment designation deferred. The area's non-attainment designation will become effective soon after.
7. Ensuring appropriate credit in the traditional SIP process for all emissions reductions from measures implemented in the early action SIP if the area does not meet all the terms of the EAC; including meeting agreed-upon key milestones and is designated (or re-designated if necessary) according to the EPA's 8-hour ozone implementation guidelines. The EPA will offer such an area no delays, exemptions, or other favorable treatment because of its participation in the EAC.

8. Not allowing any area to renew their EAC after December 31, 2007, or initiate a new compact if it has previously forfeited its participation.

VI. Signatures

  
United States Environmental Protection Agency      Regional Administrator      12-30-02  
Title      Date

  
South Carolina      Deputy Commissioner      12/20/02  
Department of Health and Environmental Control      Title      Date

  
Abbeville County Representative      Chairman      12-9-02  
Title      Date

**SOUTH CAROLINA'S 8-HOUR OZONE  
EARLY ACTION COMPACT  
Edgefield County**

The United States Environmental Protection Agency (EPA) has provided an option for areas currently meeting the 1-hour ozone standard, like those in South Carolina, to attain the 8-hour ozone standard by December 31, 2007, and obtain cleaner air sooner than federally mandated. This option offers a more expeditious time line for achieving emissions reductions than expected under the EPA's 8-hour ozone implementation rulemaking, while providing "fail-safe" provisions for the area to revert to the traditional State Implementation Plan (SIP) process if specific milestones are not met. Through the development of this Early Action Compact (EAC), local, state, and EPA officials agree to work together to develop and implement local and state early action plans. The plans will become a part of the state early action SIP to reduce ground-level ozone concentrations to comply with the 8-hour ozone standard by December 31, 2007, and maintain the standard beyond that date. Failure to meet the obligations outlined in this EAC will result in immediate reversion to the traditional non-attainment designation process as required in the Clean Air Act (CAA).

In an effort to provide this information to areas within South Carolina, the South Carolina Department of Health and Environmental Control (DHEC) held six public meetings throughout the state. The locations of the meetings were targeted to areas that could potentially be designated as non-attainment for the 8-hour ozone standard. The meetings were held in Columbia, Greenville, Florence, Rock Hill, Aiken and Charleston. EPA officials participated in five of the six meetings. The general public, local government representatives, industry representatives, and environmental interest groups attended the meetings. Prior to the meetings, DHEC issued a press release regarding the development of an early action SIP. Correspondence including a fact sheet was sent to all county administrators, Councils of Governments, Metropolitan Planning Organizations, public interest groups, industry representatives, other state agencies and others determined to be stakeholders in the process.

The Parties to this (EAC) are: Edgefield County, South Carolina Department of Health and Environmental Control (DHEC) and EPA.

**I. General Provisions**

- A. The parties commit to develop, implement and maintain the early action SIP (which includes the local early action plans) providing EPA defers the effective date of the non-attainment designation and related requirements as long as all conditions of the EAC and key milestones are met.
- B. If the potential area of non-attainment does not meet all the terms of the EAC, then it will forfeit its participation and will be subject to the full planning requirements under applicable CAA

traditional SIP processes including requirements defined as part of the EPA's 8-hour ozone implementation rulemaking.

- C. If the area has had the effective date of a non-attainment designation deferred and the area does not reach attainment of the standard by December 31, 2007, then the non-attainment designation will be effective. If the EPA's implementation schedule also requires a traditional SIP from areas on or before December 31, 2007, then a traditional SIP revision demonstrating attainment by the new attainment date will be due for the non-attainment area no later than December 31, 2008.
- D. Before formal adoption into the early action SIP, this agreement may be modified or terminated by mutual consent of all parties, or any party may withdraw from the agreement by notifying other parties in writing. If a party's withdrawal from the agreement prevents remaining signatories from satisfying any of the terms and milestones of the original agreement, the agreement will be void, any deferred effective date of the non-attainment designation would be withdrawn and the area's non-attainment designation would become effective soon after. Upon termination or withdrawal from the EAC, the area will be subject to the full planning requirements under applicable CAA traditional processes including requirements defined as part of the EPA's 8-hour ozone implementation rulemaking. The local government signatories will approve the local early action plans before submittal to DHEC for inclusion in the early action SIP. Once the local early action plan is incorporated into the early action SIP, any modifications will be treated as SIP revisions.
- E. Execution of this EAC by each Party shall be by signature of each Party's authorized representative. This agreement remains in effect until December 31, 2007.

## II. **Early Action Compact Requirements**

- A. **Milestones and Reporting**  
DHEC and local areas will assess progress towards developing and implementing the early action SIP and make a report available to EPA and the public every six months beginning in June 2003. As per EPA guidance, the key milestones for participation in the EAC are identified in the following table.

<b>Local Plan /Early Action SIP Milestones</b>		
<b>DATE</b>	<b>MILESTONE</b>	<b>RESPONSIBILITY</b>
<b>December 31, 2002</b>	EAC signed by all parties and submitted to EPA	Local/State/EPA
<b>June 16, 2003</b>	Discussion of control measures being considered to EPA	Local/State
<b>March 31, 2004</b>	Final local early action plan submitted to DHEC; copy to EPA	Local
<b>December 31, 2004</b>	Early Action State Implementation Plan submitted to EPA for incorporation into SIP	State
<b>April 1, 2005</b>	Local/State control strategies implemented no later than this date	Local/State
<b>September 30, 2005</b>	EPA takes final action on SIP submitted December 31, 2004	EPA
<b>June 30, 2006</b>	State submits progress report to EPA	State
<b>December 31, 2007</b>	Attainment of the 8-hour ozone standard	Local/State

B. Emissions Inventories

1. DHEC will be responsible for developing emissions inventories.
2. An initial modeling emissions inventory will be completed by December 31, 2002. This inventory includes:
  - a. Emissions modeling data for a 1998 episode that is representative of a typical ozone season exceedance that meets the EPA episode selection guidance;
  - b. MOBILE6 for determining on-road mobile emissions;
  - c. NONROAD model data; and,
  - d. Area source database utilizing population data allocated statewide.
3. A 2007 future year modeling emissions inventory will be developed by March 31, 2004. This inventory will sufficiently account for projected future growth in ozone precursor emissions through 2007, particularly from stationary, non-road and on-road mobile sources.
4. Additional inventories will be contingent upon legislative appropriations or other funding. Selection of specific episode inventories will be partially determined by the conceptual model, which reflects an analysis of meteorological conditions typical of high ozone events.
5. Emissions inventories will be compared and analyzed for trends in emission sources over time. The emissions inventory comparison and analysis will be completed by December 31, 2003.

C. Modeling

1. DHEC will be responsible for conducting the meteorological and air quality modeling analysis. DHEC will conduct the modeling analysis based on the "Draft Guidance on the use of Models and Other Analyses in Attainment Demonstrations for the 8-Hour Ozone NAAQS" (EPA-454/R-99-004, May 1999). The modeling will follow the guidance as facilitated by the EPA Regional Office.
2. Base case modeling will be completed by December 31, 2002. Future case modeling will be completed by October 31, 2003. One or more modeled control cases will be completed by January 31, 2004, with final revisions completed by March 31, 2004. All modeling will:
  - be SIP quality and perform within EPA's accepted margin of accuracy;
  - be carefully documented;
  - sufficiently account for projected future growth in ozone precursor emissions;
  - be accomplished by DHEC and reviewed by EPA; and,
  - be used to determine the effectiveness of NO<sub>x</sub> and/or VOC reductions. The control case(s) will be used to determine the relative effectiveness of different emission reduction strategies and to aid in the selection of appropriate emission reduction strategies.

D. Control Strategies

1. All adopted Federal and State control strategies that have been or will be implemented by the December 31, 2007, attainment date will be included in base, future and control case modeling.
2. Additional local and state control strategies under consideration will be identified by June 16, 2003. The local and state control strategies selected will be implemented as soon as practical, but no later than April 1, 2005.
3. Local and state control strategies will be specific, quantified, permanent and enforceable. The strategies will also include specific implementation dates and detailed documentation and reporting processes.
4. Voluntary strategies can play a supporting role in the local early action plan and the early action SIP. If emission reductions from voluntary strategies are quantified and credit is taken for them in the local early action plan or the early action SIP, those emission reductions will be enforceable. Additional strategies must be implemented to meet those quantified reduction requirements if quantified voluntary strategies fail. This is true for all quantified emission reductions.
5. Local and state control strategies will be designed and implemented with full stakeholder participation.

6. Local and state control strategies will be incorporated by DHEC into the early action SIP. In the event that the local area desires to add, delete or substitute strategies after early action SIP submittal, the local area will request a modification. Local early action plan modifications will be treated as SIP revisions and facilitated by DHEC.

E. Maintenance for Growth

1. The early action SIP will include a component to address emissions growth at least five years beyond December 31, 2007, ensuring that the areas will remain in attainment of the 8-hour ozone standard during that period. Attainment maintenance analysis will be completed by January 31, 2004, with final revisions completed by March 31, 2004. The analysis will employ one or more of the following or any other appropriate techniques necessary to make such a demonstration:
  - a. Modeling analysis showing ozone levels below the 8-hour ozone standard in 2012;
  - b. An annual review of growth (especially mobile and stationary source) to ensure control measures and growth assumptions are adequate;
  - c. Identification and quantification of federal, state, and/or local measures indicating sufficient reductions to offset growth estimates; or,
  - d. Any other appropriate techniques necessary to make such a determination.
2. The early action SIP must also detail a continuing planning process that includes modeling updates and modeling assumption verification (particularly growth assumptions). Modeling updates and planning processes must consider and evaluate the following:
  - a. All relevant actual new point sources;
  - b. Impacts from potential new source growth; and,
  - c. Future transportation patterns and their impact on air quality in a manner that is consistent with the most current adopted Long Range Transportation Plan and most current trend and projections of local motor vehicle emissions.
3. If the review of emissions growth in conjunction with the continuing planning process demonstrates that adopted emission reduction strategies are inadequate to address growth in emissions, additional measures will be added to the early action plan. Local planning processes should prepare for this possibility.
4. In the event that the continuing planning process identifies the need to add, delete, or substitute control strategies after the local early action plan has been incorporated into the early action SIP, the local area will initiate, and DHEC will facilitate a SIP revision to accommodate changes.

**F. Public Involvement**

1. Public involvement has been and will continue to be strongly encouraged during the planning and implementation process.
2. Public awareness programs will be used to provide opportunities for involvement in the planning process, implementation of control strategies, and any other issues important to the area.
3. Interested stakeholders (i.e., local, state, and federal government, citizens, public interest groups, and the business community) will continue to be involved in the planning process as early as possible. Planning meetings will be open to the public, with posted meeting times and locations. Early action SIP drafts will be publicly available, and the drafting process will have sufficient opportunities for comment from all interested stakeholders.
4. Opportunities for public comment on the proposed early action SIP will be provided and will follow the traditional SIP revision process as implemented by DHEC.
5. Semi-annual reports detailing, at a minimum, progress toward key milestones, will be made available to the public.
6. DHEC has established and will maintain a website for South Carolina's Early Action Plan for the 8-hour ozone standard, located at [www.scdhec.net/baq/eap.html](http://www.scdhec.net/baq/eap.html).

**III. Local Government Responsibilities**

The local governments agree to develop and implement a local early action plan that will promote the area's attainment by December 31, 2007, of the 8-hour ozone standard and maintenance until at least 2012. The local governments will develop this plan in coordination with the DHEC, EPA, stakeholders and the public. The local early action plan will include a process to evaluate the effectiveness and maintain long-term compliance with the standard.

After all adopted Federal and State controls that have been or will be implemented by the attainment date of December 31, 2007, are accounted for in the modeling, the local area must adopt additional local controls, as necessary to demonstrate attainment of the 8-hour ozone standard by December 31, 2007. Local controls under consideration must be identified and described by June 16, 2003. These measures must be included in the semi-annual report made available to the public.

The draft local early action plan will be submitted to DHEC by August 31, 2003. The final local early action plan will be submitted to DHEC, with a copy forwarded to EPA, by March 31, 2004. The adopted local early action plan will be included in the early action SIP due December 31, 2004.

In the event a development or issue arises that may impact performance or progress toward key milestones (including if a key milestone will be or has been missed and/or if a termination or modification has been requested), the responsible party will notify all other signatories in writing as soon as possible.

#### **IV. The South Carolina Department of Health and Environmental Control**

DHEC agrees to develop and implement a state early action SIP that will demonstrate the participating area's attainment by December 31, 2007, of the 8-hour ozone standard and maintenance until at least 2012. DHEC will develop this plan in coordination with the local governments, EPA, stakeholders and the public. The state early action SIP will include a process to monitor and maintain long-term compliance with the standard.

It is the responsibility of each state under the CAA to ensure attainment with all National Ambient Air Quality Standards. At any such time that an area is deemed non-attainment, the state will be required to develop a plan to return the area(s) to attainment in accordance with the CAA. If applicable, South Carolina is committed to working with adjacent states to assure mutual attainment of national standards.

In the event a development or issue arises that may impact performance or progress toward key milestones (including if a key milestone will be or has been missed and/or if a termination or modification has been requested), DHEC will notify all other signatories in writing as soon as possible.

DHEC will provide support to areas throughout the planning and implementation process by:

1. Developing emission inventories, modeling, trend analysis, and quantification and comparison of control measures.
2. Providing necessary information on all federal and state adopted emission reduction measures, which affect the area.
3. Providing technical and strategic assistance, as appropriate, in the selection and implementation of control strategies.
4. Providing technical and planning assistance in developing and implementing processes to address the impact of emissions growth beyond the attainment date.
5. Maintaining monitors and reporting and analysis of monitoring data.
6. Promoting public awareness efforts.
7. Coordinating communication between local areas and the EPA to facilitate continuing the EPA review of local work.
8. Ensuring expeditious review of local early action plan(s), and if deemed adequate, proposing modification of the early action SIP to adopt the early action plan.

9. Adopting control measures into the early action SIP as expeditiously as possible. The final complete early action SIP revision must be completed, adopted, and submitted by the state to the EPA by December 31, 2004.
10. Tracking progress. If any milestone is missed and EPA withdraws the deferred effective date, thereby triggering a non-attainment designation and applicable statutory requirements, the state will strive to submit a traditional non-attainment SIP within one year. However, due to the South Carolina legislative review process, it may take at least eighteen months.
11. Working concurrently with areas not electing to participate in the early action SIP process in preparing the traditional SIP submittal as required by the CAA.

## **V. The Environmental Protection Agency**

The EPA will participate by:

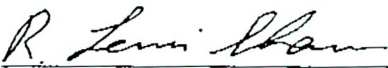
1. Recognizing the local area's and state's commitment to voluntarily adopt an early, substantive, enforceable, and scientifically-based attainment plan with early implementation of control measures by becoming a party to the EAC developed in conformance with South Carolina's Protocol for Early Action Compacts.
2. Providing technical assistance to the state(s) and local area(s) in the development of the early action plan.
3. Reviewing and approving the completed early action SIP by no later than September 30, 2005.
4. Deferring the effective date of non-attainment designation and related requirements for participating areas that fail to meet the 8-hour ozone standard as long as all terms and key milestones of the EAC are being met, including submission of the early action SIP revision by December 31, 2004.
5. Designating the area expeditiously as attainment and imposing no additional requirements, provided that the monitors in the area reflect attainment by December 31, 2007.
6. Taking action to withdraw the deferred effective date if the area violates the standard as of December 31, 2007, and the area has had the effective date of its non-attainment designation deferred. The area's non-attainment designation will become effective soon after.
7. Ensuring appropriate credit in the traditional SIP process for all emissions reductions from measures implemented in the early action SIP if the area does not meet all the terms of the EAC; including meeting agreed-upon key milestones and is designated (or re-designated if necessary) according to the EPA's 8-hour ozone implementation guidelines. The EPA will offer such an area no delays, exemptions, or other favorable treatment because of its participation in the EAC.

8. Not allowing any area to renew their EAC after December 31, 2007, or initiate a new compact if it has previously forfeited its participation.

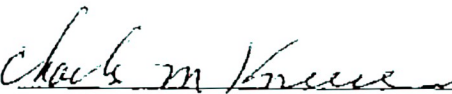
VI. Signatures

  
United States Environmental Protection Agency

Regional Administrator 12-30-02  
Title Date

  
South Carolina  
Department of Health and Environmental Control

Deputy Commissioner 12/20/02  
Title Date

  
Edgefield County Representative

Chairman Dec. 3, 2002  
Title Date

**SOUTH CAROLINA'S 8-HOUR OZONE  
EARLY ACTION COMPACT**  
Greenwood County

The United States Environmental Protection Agency (EPA) has provided an option for areas currently meeting the 1-hour ozone standard, like those in South Carolina, to attain the 8-hour ozone standard by December 31, 2007, and obtain cleaner air sooner than federally mandated. This option offers a more expeditious time line for achieving emissions reductions than expected under the EPA's 8-hour ozone implementation rulemaking, while providing "fail-safe" provisions for the area to revert to the traditional State Implementation Plan (SIP) process if specific milestones are not met. Through the development of this Early Action Compact (EAC), local, state, and EPA officials agree to work together to develop and implement local and state early action plans. The plans will become a part of the state early action SIP to reduce ground-level ozone concentrations to comply with the 8-hour ozone standard by December 31, 2007, and maintain the standard beyond that date. Failure to meet the obligations outlined in this EAC will result in immediate reversion to the traditional non-attainment designation process as required in the Clean Air Act (CAA).

In an effort to provide this information to areas within South Carolina, the South Carolina Department of Health and Environmental Control (DHEC) held six public meetings throughout the state. The locations of the meetings were targeted to areas that could potentially be designated as non-attainment for the 8-hour ozone standard. The meetings were held in Columbia, Greenville, Florence, Rock Hill, Aiken and Charleston. EPA officials participated in five of the six meetings. The general public, local government representatives, industry representatives, and environmental interest groups attended the meetings. Prior to the meetings, DHEC issued a press release regarding the development of an early action SIP. Correspondence including a fact sheet was sent to all county administrators, Councils of Governments, Metropolitan Planning Organizations, public interest groups, industry representatives, other state agencies and others determined to be stakeholders in the process.

The Parties to this EAC are: Greenwood County, South Carolina Department of Health and Environmental Control (DHEC) and EPA.

**I. General Provisions**

- A. The parties commit to develop, implement and maintain the early action SIP (which includes the local early action plans) providing EPA defers the effective date of the non-attainment designation and related requirements as long as all conditions of the EAC and key milestones are met.
- B. If the potential area of non-attainment does not meet all the terms of the EAC, then it will forfeit its participation and will be subject to the full planning requirements under applicable CAA

traditional SIP processes including requirements defined as part of the EPA's 8-hour ozone implementation rulemaking.

- C. If the area has had the effective date of a non-attainment designation deferred and the area does not reach attainment of the standard by December 31, 2007, then the non-attainment designation will be effective. If the EPA's implementation schedule also requires a traditional SIP from areas on or before December 31, 2007, then a traditional SIP revision demonstrating attainment by the new attainment date will be due for the non-attainment area no later than December 31, 2008.
- D. Before formal adoption into the early action SIP, this agreement may be modified or terminated by mutual consent of all parties, or any party may withdraw from the agreement by notifying other parties in writing. If a party's withdrawal from the agreement prevents remaining signatories from satisfying any of the terms and milestones of the original agreement, the agreement will be void, any deferred effective date of the non-attainment designation would be withdrawn and the area's non-attainment designation would become effective soon after. Upon termination or withdrawal from the EAC, the area will be subject to the full planning requirements under applicable CAA traditional processes including requirements defined as part of the EPA's 8-hour ozone implementation rulemaking. The local government signatories will approve the local early action plans before submittal to DHEC for inclusion in the early action SIP. Once the local early action plan is incorporated into the early action SIP, any modifications will be treated as SIP revisions.
- E. Execution of this EAC by each Party shall be by signature of each Party's authorized representative. This agreement remains in effect until December 31, 2007.

## II. **Early Action Compact Requirements**

- A. **Milestones and Reporting**  
DHEC and local areas will assess progress towards developing and implementing the early action SIP and make a report available to EPA and the public every six months beginning in June 2003. As per EPA guidance, the key milestones for participation in the EAC are identified in the following table.

<b>Local Plan /Early Action SIP Milestones</b>		
<b>DATE</b>	<b>MILESTONE</b>	<b>RESPONSIBILITY</b>
<b>December 31, 2002</b>	EAC signed by all parties and submitted to EPA	Local/State/EPA
<b>June 16, 2003</b>	Discussion of control measures being considered to EPA	Local/State
<b>March 31, 2004</b>	Final local early action plan submitted to DHEC; copy to EPA	Local
<b>December 31, 2004</b>	Early Action State Implementation Plan submitted to EPA for incorporation into SIP	State
<b>April 1, 2005</b>	Local/State control strategies implemented no later than this date	Local/State
<b>September 30, 2005</b>	EPA takes final action on SIP submitted December 31, 2004	EPA
<b>June 30, 2006</b>	State submits progress report to EPA	State
<b>December 31, 2007</b>	Attainment of the 8-hour ozone standard	Local/State

B. Emissions Inventories

1. DHEC will be responsible for developing emissions inventories.
2. An initial modeling emissions inventory will be completed by December 31, 2002. This inventory includes:
  - a. Emissions modeling data for a 1998 episode that is representative of a typical ozone season exceedance that meets the EPA episode selection guidance;
  - b. MOBILE6 for determining on-road mobile emissions;
  - c. NONROAD model data; and,
  - d. Area source database utilizing population data allocated statewide.
3. A 2007 future year modeling emissions inventory will be developed by March 31, 2004. This inventory will sufficiently account for projected future growth in ozone precursor emissions through 2007, particularly from stationary, non-road and on-road mobile sources.
4. Additional inventories will be contingent upon legislative appropriations or other funding. Selection of specific episode inventories will be partially determined by the conceptual model, which reflects an analysis of meteorological conditions typical of high ozone events.
5. Emissions inventories will be compared and analyzed for trends in emission sources over time. The emissions inventory comparison and analysis will be completed by December 31, 2003.

C. Modeling

1. DHEC will be responsible for conducting the meteorological and air quality modeling analysis. DHEC will conduct the modeling analysis based on the "Draft Guidance on the use of Models and Other Analyses in Attainment Demonstrations for the 8-Hour Ozone NAAQS" (EPA-454/R-99-004, May 1999). The modeling will follow the guidance as facilitated by the EPA Regional Office.
2. Base case modeling will be completed by December 31, 2002. Future case modeling will be completed by October 31, 2003. One or more modeled control cases will be completed by January 31, 2004, with final revisions completed by March 31, 2004. All modeling will:
  - be SIP quality and perform within EPA's accepted margin of accuracy;
  - be carefully documented;
  - sufficiently account for projected future growth in ozone precursor emissions;
  - be accomplished by DHEC and reviewed by EPA; and,
  - be used to determine the effectiveness of NO<sub>x</sub> and/or VOC reductions. The control case(s) will be used to determine the relative effectiveness of different emission reduction strategies and to aid in the selection of appropriate emission reduction strategies.

D. Control Strategies

1. All adopted Federal and State control strategies that have been or will be implemented by the December 31, 2007, attainment date will be included in base, future and control case modeling.
2. Additional local and state control strategies under consideration will be identified by June 16, 2003. The local and state control strategies selected will be implemented as soon as practical, but no later than April 1, 2005.
3. Local and state control strategies will be specific, quantified, permanent and enforceable. The strategies will also include specific implementation dates and detailed documentation and reporting processes.
4. Voluntary strategies can play a supporting role in the local early action plan and the early action SIP. If emission reductions from voluntary strategies are quantified and credit is taken for them in the local early action plan or the early action SIP, those emission reductions will be enforceable. Additional strategies must be implemented to meet those quantified reduction requirements if quantified voluntary strategies fail. This is true for all quantified emission reductions.
5. Local and state control strategies will be designed and implemented with full stakeholder participation.

6. Local and state control strategies will be incorporated by DHEC into the early action SIP. In the event that the local area desires to add, delete or substitute strategies after early action SIP submittal, the local area will request a modification. Local early action plan modifications will be treated as SIP revisions and facilitated by DHEC.

E. Maintenance for Growth

1. The early action SIP will include a component to address emissions growth at least five years beyond December 31, 2007, ensuring that the areas will remain in attainment of the 8-hour ozone standard during that period. Attainment maintenance analysis will be completed by January 31, 2004, with final revisions completed by March 31, 2004. The analysis will employ one or more of the following or any other appropriate techniques necessary to make such a demonstration:
  - a. Modeling analysis showing ozone levels below the 8-hour ozone standard in 2012;
  - b. An annual review of growth (especially mobile and stationary source) to ensure control measures and growth assumptions are adequate;
  - c. Identification and quantification of federal, state, and/or local measures indicating sufficient reductions to offset growth estimates; or,
  - d. Any other appropriate techniques necessary to make such a determination.
2. The early action SIP must also detail a continuing planning process that includes modeling updates and modeling assumption verification (particularly growth assumptions). Modeling updates and planning processes must consider and evaluate the following:
  - a. All relevant actual new point sources;
  - b. Impacts from potential new source growth; and,
  - c. Future transportation patterns and their impact on air quality in a manner that is consistent with the most current adopted Long Range Transportation Plan and most current trend and projections of local motor vehicle emissions.
3. If the review of emissions growth in conjunction with the continuing planning process demonstrates that adopted emission reduction strategies are inadequate to address growth in emissions, additional measures will be added to the early action plan. Local planning processes should prepare for this possibility.
4. In the event that the continuing planning process identifies the need to add, delete, or substitute control strategies after the local early action plan has been incorporated into the early action SIP, the local area will initiate, and DHEC will facilitate a SIP revision to accommodate changes.

**F. Public Involvement**

1. Public involvement has been and will continue to be strongly encouraged during the planning and implementation process.
2. Public awareness programs will be used to provide opportunities for involvement in the planning process, implementation of control strategies, and any other issues important to the area.
3. Interested stakeholders (i.e., local, state, and federal government, citizens, public interest groups, and the business community) will continue to be involved in the planning process as early as possible. Planning meetings will be open to the public, with posted meeting times and locations. Early action SIP drafts will be publicly available, and the drafting process will have sufficient opportunities for comment from all interested stakeholders.
4. Opportunities for public comment on the proposed early action SIP will be provided and will follow the traditional SIP revision process as implemented by DHEC.
5. Semi-annual reports detailing, at a minimum, progress toward key milestones, will be made available to the public.
6. DHEC has established and will maintain a website for South Carolina's Early Action Plan for the 8-hour ozone standard, located at [www.scdhec.net/baq/eap.html](http://www.scdhec.net/baq/eap.html).

**III. Local Government Responsibilities**

The local governments agree to develop and implement a local early action plan that will promote the area's attainment by December 31, 2007, of the 8-hour ozone standard and maintenance until at least 2012. The local governments will develop this plan in coordination with the DHEC, EPA, stakeholders and the public. The local early action plan will include a process to evaluate the effectiveness and maintain long-term compliance with the standard.

After all adopted Federal and State controls that have been or will be implemented by the attainment date of December 31, 2007, are accounted for in the modeling, the local area must adopt additional local controls, as necessary to demonstrate attainment of the 8-hour ozone standard by December 31, 2007. Local controls under consideration must be identified and described by June 16, 2003. These measures must be included in the semi-annual report made available to the public.

The draft local early action plan will be submitted to DHEC by August 31, 2003. The final local early action plan will be submitted to DHEC, with a copy forwarded to EPA, by March 31, 2004. The adopted local early action plan will be included in the early action SIP due December 31, 2004.

In the event a development or issue arises that may impact performance or progress toward key milestones (including if a key milestone will be or has been missed and/or if a termination or modification has been requested), the responsible party will notify all other signatories in writing as soon as possible.

#### **IV. The South Carolina Department of Health and Environmental Control**

DHEC agrees to develop and implement a state early action SIP that will demonstrate the participating area's attainment by December 31, 2007, of the 8-hour ozone standard and maintenance until at least 2012. DHEC will develop this plan in coordination with the local governments, EPA, stakeholders and the public. The state early action SIP will include a process to monitor and maintain long-term compliance with the standard.

It is the responsibility of each state under the CAA to ensure attainment with all National Ambient Air Quality Standards. At any such time that an area is deemed non-attainment, the state will be required to develop a plan to return the area(s) to attainment in accordance with the CAA. If applicable, South Carolina is committed to working with adjacent states to assure mutual attainment of national standards.

In the event a development or issue arises that may impact performance or progress toward key milestones (including if a key milestone will be or has been missed and/or if a termination or modification has been requested), DHEC will notify all other signatories in writing as soon as possible.

DHEC will provide support to areas throughout the planning and implementation process by:

1. Developing emission inventories, modeling, trend analysis, and quantification and comparison of control measures.
2. Providing necessary information on all federal and state adopted emission reduction measures, which affect the area.
3. Providing technical and strategic assistance, as appropriate, in the selection and implementation of control strategies.
4. Providing technical and planning assistance in developing and implementing processes to address the impact of emissions growth beyond the attainment date.
5. Maintaining monitors and reporting and analysis of monitoring data.
6. Promoting public awareness efforts.
7. Coordinating communication between local areas and the EPA to facilitate continuing the EPA review of local work.
8. Ensuring expeditious review of local early action plan(s), and if deemed adequate, proposing modification of the early action SIP to adopt the early action plan.

9. Adopting control measures into the early action SIP as expeditiously as possible. The final complete early action SIP revision must be completed, adopted, and submitted by the state to the EPA by December 31, 2004.
10. Tracking progress. If any milestone is missed and EPA withdraws the deferred effective date, thereby triggering a non-attainment designation and applicable statutory requirements, the state will strive to submit a traditional non-attainment SIP within one year. However, due to the South Carolina legislative review process, it may take at least eighteen months.
11. Working concurrently with areas not electing to participate in the early action SIP process in preparing the traditional SIP submittal as required by the CAA.

## **V. The Environmental Protection Agency**


The EPA will participate by:

1. Recognizing the local area's and state's commitment to voluntarily adopt an early, substantive, enforceable, and scientifically-based attainment plan with early implementation of control measures by becoming a party to the EAC developed in conformance with South Carolina's Protocol for Early Action Compacts.
2. Providing technical assistance to the state(s) and local area(s) in the development of the early action plan.
3. Reviewing and approving the completed early action SIP by no later than September 30, 2005.
4. Deferring the effective date of non-attainment designation and related requirements for participating areas that fail to meet the 8-hour ozone standard as long as all terms and key milestones of the EAC are being met, including submission of the early action SIP revision by December 31, 2004.
5. Designating the area expeditiously as attainment and imposing no additional requirements, provided that the monitors in the area reflect attainment by December 31, 2007.
6. Taking action to withdraw the deferred effective date if the area violates the standard as of December 31, 2007, and the area has had the effective date of its non-attainment designation deferred. The area's non-attainment designation will become effective soon after.
7. Ensuring appropriate credit in the traditional SIP process for all emissions reductions from measures implemented in the early action SIP if the area does not meet all the terms of the EAC; including meeting agreed-upon key milestones and is designated (or re-designated if necessary) according to the EPA's 8-hour ozone implementation guidelines. The EPA will offer such an area no delays, exemptions, or other favorable treatment because of its participation in the EAC.

8. Not allowing any area to renew their EAC after December 31, 2007, or initiate a new compact if it has previously forfeited its participation.

VI. Signatures

  
United States Environmental Protection Agency      Regional Administrator      12-30-02  
Title      Date

  
South Carolina      Deputy Commissioner      12/27/02  
Department of Health and Environmental Control      Title      Date

  
Greenwood County Representative      Chairman      Dec. 17, 2002  
Title      Date

**SOUTH CAROLINA'S 8-HOUR OZONE  
EARLY ACTION COMPACT  
Laurens County**

The United States Environmental Protection Agency (EPA) has provided an option for areas currently meeting the 1-hour ozone standard, like those in South Carolina, to attain the 8-hour ozone standard by December 31, 2007, and obtain cleaner air sooner than federally mandated. This option offers a more expeditious time line for achieving emissions reductions than expected under the EPA's 8-hour ozone implementation rulemaking, while providing "fail-safe" provisions for the area to revert to the traditional State Implementation Plan (SIP) process if specific milestones are not met. Through the development of this Early Action Compact (EAC), local, state, and EPA officials agree to work together to develop and implement local and state early action plans. The plans will become a part of the state early action SIP to reduce ground-level ozone concentrations to comply with the 8-hour ozone standard by December 31, 2007, and maintain the standard beyond that date. Failure to meet the obligations outlined in this EAC will result in immediate reversion to the traditional non-attainment designation process as required in the Clean Air Act (CAA).

In an effort to provide this information to areas within South Carolina, the South Carolina Department of Health and Environmental Control (DHEC) held six public meetings throughout the state. The locations of the meetings were targeted to areas that could potentially be designated as non-attainment for the 8-hour ozone standard. The meetings were held in Columbia, Greenville, Florence, Rock Hill, Aiken and Charleston. EPA officials participated in five of the six meetings. The general public, local government representatives, industry representatives, and environmental interest groups attended the meetings. Prior to the meetings, DHEC issued a press release regarding the development of an early action SIP. Correspondence including a fact sheet was sent to all county administrators, Councils of Governments, Metropolitan Planning Organizations, public interest groups, industry representatives, other state agencies and others determined to be stakeholders in the process.

The Parties to this (EAC) are: Laurens County, South Carolina Department of Health and Environmental Control (DHEC) and EPA.

**I. General Provisions**

- A. The parties commit to develop, implement and maintain the early action SIP (which includes the local early action plans) providing EPA defers the effective date of the non-attainment designation and related requirements as long as all conditions of the EAC and key milestones are met.
- B. If the potential area of non-attainment does not meet all the terms of the EAC, then it will forfeit its participation and will be subject to the full planning requirements under applicable CAA

traditional SIP processes including requirements defined as part of the EPA's 8-hour ozone implementation rulemaking.

- C. If the area has had the effective date of a non-attainment designation deferred and the area does not reach attainment of the standard by December 31, 2007, then the non-attainment designation will be effective. If the EPA's implementation schedule also requires a traditional SIP from areas on or before December 31, 2007, then a traditional SIP revision demonstrating attainment by the new attainment date will be due for the non-attainment area no later than December 31, 2008.
- D. Before formal adoption into the early action SIP, this agreement may be modified or terminated by mutual consent of all parties, or any party may withdraw from the agreement by notifying other parties in writing. If a party's withdrawal from the agreement prevents remaining signatories from satisfying any of the terms and milestones of the original agreement, the agreement will be void, any deferred effective date of the non-attainment designation would be withdrawn and the area's non-attainment designation would become effective soon after. Upon termination or withdrawal from the EAC, the area will be subject to the full planning requirements under applicable CAA traditional processes including requirements defined as part of the EPA's 8-hour ozone implementation rulemaking. The local government signatories will approve the local early action plans before submittal to DHEC for inclusion in the early action SIP. Once the local early action plan is incorporated into the early action SIP, any modifications will be treated as SIP revisions.
- E. Execution of this EAC by each Party shall be by signature of each Party's authorized representative. This agreement remains in effect until December 31, 2007.

## II. **Early Action Compact Requirements**

- A. **Milestones and Reporting**  
DHEC and local areas will assess progress towards developing and implementing the early action SIP and make a report available to EPA and the public every six months beginning in June 2003. As per EPA guidance, the key milestones for participation in the EAC are identified in the following table.

<b>Local Plan /Early Action SIP Milestones</b>		
<b>DATE</b>	<b>MILESTONE</b>	<b>RESPONSIBILITY</b>
<b>December 31, 2002</b>	EAC signed by all parties and submitted to EPA	Local/State/EPA
<b>June 16, 2003</b>	Discussion of control measures being considered to EPA	Local/State
<b>March 31, 2004</b>	Final local early action plan submitted to DHEC; copy to EPA	Local
<b>December 31, 2004</b>	Early Action State Implementation Plan submitted to EPA for incorporation into SIP	State
<b>April 1, 2005</b>	Local/State control strategies implemented no later than this date	Local/State
<b>September 30, 2005</b>	EPA takes final action on SIP submitted December 31, 2004	EPA
<b>June 30, 2006</b>	State submits progress report to EPA	State
<b>December 31, 2007</b>	Attainment of the 8-hour ozone standard	Local/State

B. Emissions Inventories

1. DHEC will be responsible for developing emissions inventories.
2. An initial modeling emissions inventory will be completed by December 31, 2002. This inventory includes:
  - a. Emissions modeling data for a 1998 episode that is representative of a typical ozone season exceedance that meets the EPA episode selection guidance;
  - b. MOBILE6 for determining on-road mobile emissions;
  - c. NONROAD model data; and,
  - d. Area source database utilizing population data allocated statewide.
3. A 2007 future year modeling emissions inventory will be developed by March 31, 2004. This inventory will sufficiently account for projected future growth in ozone precursor emissions through 2007, particularly from stationary, non-road and on-road mobile sources.
4. Additional inventories will be contingent upon legislative appropriations or other funding. Selection of specific episode inventories will be partially determined by the conceptual model, which reflects an analysis of meteorological conditions typical of high ozone events.
5. Emissions inventories will be compared and analyzed for trends in emission sources over time. The emissions inventory comparison and analysis will be completed by December 31, 2003.

C. Modeling

1. DHEC will be responsible for conducting the meteorological and air quality modeling analysis. DHEC will conduct the modeling analysis based on the "Draft Guidance on the use of Models and Other Analyses in Attainment Demonstrations for the 8-Hour Ozone NAAQS" (EPA-454/R-99-004, May 1999). The modeling will follow the guidance as facilitated by the EPA Regional Office.
2. Base case modeling will be completed by December 31, 2002. Future case modeling will be completed by October 31, 2003. One or more modeled control cases will be completed by January 31, 2004, with final revisions completed by March 31, 2004. All modeling will:
  - be SIP quality and perform within EPA's accepted margin of accuracy;
  - be carefully documented;
  - sufficiently account for projected future growth in ozone precursor emissions;
  - be accomplished by DHEC and reviewed by EPA; and,
  - be used to determine the effectiveness of NO<sub>x</sub> and/or VOC reductions. The control case(s) will be used to determine the relative effectiveness of different emission reduction strategies and to aid in the selection of appropriate emission reduction strategies.

D. Control Strategies

1. All adopted Federal and State control strategies that have been or will be implemented by the December 31, 2007, attainment date will be included in base, future and control case modeling.
2. Additional local and state control strategies under consideration will be identified by June 16, 2003. The local and state control strategies selected will be implemented as soon as practical, but no later than April 1, 2005.
3. Local and state control strategies will be specific, quantified, permanent and enforceable. The strategies will also include specific implementation dates and detailed documentation and reporting processes.
4. Voluntary strategies can play a supporting role in the local early action plan and the early action SIP. If emission reductions from voluntary strategies are quantified and credit is taken for them in the local early action plan or the early action SIP, those emission reductions will be enforceable. Additional strategies must be implemented to meet those quantified reduction requirements if quantified voluntary strategies fail. This is true for all quantified emission reductions.
5. Local and state control strategies will be designed and implemented with full stakeholder participation.

6. Local and state control strategies will be incorporated by DHEC into the early action SIP. In the event that the local area desires to add, delete or substitute strategies after early action SIP submittal, the local area will request a modification. Local early action plan modifications will be treated as SIP revisions and facilitated by DHEC.

E. Maintenance for Growth

1. The early action SIP will include a component to address emissions growth at least five years beyond December 31, 2007, ensuring that the areas will remain in attainment of the 8-hour ozone standard during that period. Attainment maintenance analysis will be completed by January 31, 2004, with final revisions completed by March 31, 2004. The analysis will employ one or more of the following or any other appropriate techniques necessary to make such a demonstration:
  - a. Modeling analysis showing ozone levels below the 8-hour ozone standard in 2012;
  - b. An annual review of growth (especially mobile and stationary source) to ensure control measures and growth assumptions are adequate;
  - c. Identification and quantification of federal, state, and/or local measures indicating sufficient reductions to offset growth estimates; or,
  - d. Any other appropriate techniques necessary to make such a determination.
2. The early action SIP must also detail a continuing planning process that includes modeling updates and modeling assumption verification (particularly growth assumptions). Modeling updates and planning processes must consider and evaluate the following:
  - a. All relevant actual new point sources;
  - b. Impacts from potential new source growth; and,
  - c. Future transportation patterns and their impact on air quality in a manner that is consistent with the most current adopted Long Range Transportation Plan and most current trend and projections of local motor vehicle emissions.
3. If the review of emissions growth in conjunction with the continuing planning process demonstrates that adopted emission reduction strategies are inadequate to address growth in emissions, additional measures will be added to the early action plan. Local planning processes should prepare for this possibility.
4. In the event that the continuing planning process identifies the need to add, delete, or substitute control strategies after the local early action plan has been incorporated into the early action SIP, the local area will initiate, and DHEC will facilitate a SIP revision to accommodate changes.

**F. Public Involvement**

1. Public involvement has been and will continue to be strongly encouraged during the planning and implementation process.
2. Public awareness programs will be used to provide opportunities for involvement in the planning process, implementation of control strategies, and any other issues important to the area.
3. Interested stakeholders (i.e., local, state, and federal government, citizens, public interest groups, and the business community) will continue to be involved in the planning process as early as possible. Planning meetings will be open to the public, with posted meeting times and locations. Early action SIP drafts will be publicly available, and the drafting process will have sufficient opportunities for comment from all interested stakeholders.
4. Opportunities for public comment on the proposed early action SIP will be provided and will follow the traditional SIP revision process as implemented by DHEC.
5. Semi-annual reports detailing, at a minimum, progress toward key milestones, will be made available to the public.
6. DHEC has established and will maintain a website for South Carolina's Early Action Plan for the 8-hour ozone standard, located at [www.scdhec.net/baq/eap.html](http://www.scdhec.net/baq/eap.html).

**III. Local Government Responsibilities**

The local governments agree to develop and implement a local early action plan that will promote the area's attainment by December 31, 2007, of the 8-hour ozone standard and maintenance until at least 2012. The local governments will develop this plan in coordination with the DHEC, EPA, stakeholders and the public. The local early action plan will include a process to evaluate the effectiveness and maintain long-term compliance with the standard.

After all adopted Federal and State controls that have been or will be implemented by the attainment date of December 31, 2007, are accounted for in the modeling, the local area must adopt additional local controls, as necessary to demonstrate attainment of the 8-hour ozone standard by December 31, 2007. Local controls under consideration must be identified and described by June 16, 2003. These measures must be included in the semi-annual report made available to the public.

The draft local early action plan will be submitted to DHEC by August 31, 2003. The final local early action plan will be submitted to DHEC, with a copy forwarded to EPA, by March 31, 2004. The adopted local early action plan will be included in the early action SIP due December 31, 2004.

In the event a development or issue arises that may impact performance or progress toward key milestones (including if a key milestone will be or has been missed and/or if a termination or modification has been requested), the responsible party will notify all other signatories in writing as soon as possible.

#### **IV. The South Carolina Department of Health and Environmental Control**

DHEC agrees to develop and implement a state early action SIP that will demonstrate the participating area's attainment by December 31, 2007, of the 8-hour ozone standard and maintenance until at least 2012. DHEC will develop this plan in coordination with the local governments, EPA, stakeholders and the public. The state early action SIP will include a process to monitor and maintain long-term compliance with the standard.

It is the responsibility of each state under the CAA to ensure attainment with all National Ambient Air Quality Standards. At any such time that an area is deemed non-attainment, the state will be required to develop a plan to return the area(s) to attainment in accordance with the CAA. If applicable, South Carolina is committed to working with adjacent states to assure mutual attainment of national standards.

In the event a development or issue arises that may impact performance or progress toward key milestones (including if a key milestone will be or has been missed and/or if a termination or modification has been requested), DHEC will notify all other signatories in writing as soon as possible.

DHEC will provide support to areas throughout the planning and implementation process by:

1. Developing emission inventories, modeling, trend analysis, and quantification and comparison of control measures.
2. Providing necessary information on all federal and state adopted emission reduction measures, which affect the area.
3. Providing technical and strategic assistance, as appropriate, in the selection and implementation of control strategies.
4. Providing technical and planning assistance in developing and implementing processes to address the impact of emissions growth beyond the attainment date.
5. Maintaining monitors and reporting and analysis of monitoring data.
6. Promoting public awareness efforts.
7. Coordinating communication between local areas and the EPA to facilitate continuing the EPA review of local work.
8. Ensuring expeditious review of local early action plan(s), and if deemed adequate, proposing modification of the early action SIP to adopt the early action plan.

9. Adopting control measures into the early action SIP as expeditiously as possible. The final complete early action SIP revision must be completed, adopted, and submitted by the state to the EPA by December 31, 2004.
10. Tracking progress. If any milestone is missed and EPA withdraws the deferred effective date, thereby triggering a non-attainment designation and applicable statutory requirements, the state will strive to submit a traditional non-attainment SIP within one year. However, due to the South Carolina legislative review process, it may take at least eighteen months.
11. Working concurrently with areas not electing to participate in the early action SIP process in preparing the traditional SIP submittal as required by the CAA.

## **V. The Environmental Protection Agency**

The EPA will participate by:

1. Recognizing the local area's and state's commitment to voluntarily adopt an early, substantive, enforceable, and scientifically-based attainment plan with early implementation of control measures by becoming a party to the EAC developed in conformance with South Carolina's Protocol for Early Action Compacts.
2. Providing technical assistance to the state(s) and local area(s) in the development of the early action plan.
3. Reviewing and approving the completed early action SIP by no later than September 30, 2005.
4. Deferring the effective date of non-attainment designation and related requirements for participating areas that fail to meet the 8-hour ozone standard as long as all terms and key milestones of the EAC are being met, including submission of the early action SIP revision by December 31, 2004.
5. Designating the area expeditiously as attainment and imposing no additional requirements, provided that the monitors in the area reflect attainment by December 31, 2007.
6. Taking action to withdraw the deferred effective date if the area violates the standard as of December 31, 2007, and the area has had the effective date of its non-attainment designation deferred. The area's non-attainment designation will become effective soon after.
7. Ensuring appropriate credit in the traditional SIP process for all emissions reductions from measures implemented in the early action SIP if the area does not meet all the terms of the EAC; including meeting agreed-upon key milestones and is designated (or re-designated if necessary) according to the EPA's 8-hour ozone implementation guidelines. The EPA will offer such an area no delays, exemptions, or other favorable treatment because of its participation in the EAC.

8. Not allowing any area to renew their EAC after December 31, 2007, or initiate a new compact if it has previously forfeited its participation.

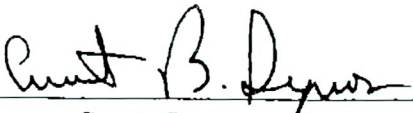
VI. Signatures

  
United States Environmental Protection Agency

Regional Administrator 12 30 02  
Title Date

R. Linn Shan  
South Carolina  
Department of Health and Environmental Control

Deputy Commissioner 12/20/02  
Title Date

  
Laurens County Representative

County Administrator Dec. 4, 2002  
Title Date

**SOUTH CAROLINA'S 8-HOUR OZONE  
EARLY ACTION COMPACT**  
Saluda County

The United States Environmental Protection Agency (EPA) has provided an option for areas currently meeting the 1-hour ozone standard, like those in South Carolina, to attain the 8-hour ozone standard by December 31, 2007, and obtain cleaner air sooner than federally mandated. This option offers a more expeditious time line for achieving emissions reductions than expected under the EPA's 8-hour ozone implementation rulemaking, while providing "fail-safe" provisions for the area to revert to the traditional State Implementation Plan (SIP) process if specific milestones are not met. Through the development of this Early Action Compact (EAC), local, state, and EPA officials agree to work together to develop and implement local and state early action plans. The plans will become a part of the state early action SIP to reduce ground-level ozone concentrations to comply with the 8-hour ozone standard by December 31, 2007, and maintain the standard beyond that date. Failure to meet the obligations outlined in this EAC will result in immediate reversion to the traditional non-attainment designation process as required in the Clean Air Act (CAA).

In an effort to provide this information to areas within South Carolina, the South Carolina Department of Health and Environmental Control (DHEC) held six public meetings throughout the state. The locations of the meetings were targeted to areas that could potentially be designated as non-attainment for the 8-hour ozone standard. The meetings were held in Columbia, Greenville, Florence, Rock Hill, Aiken and Charleston. EPA officials participated in five of the six meetings. The general public, local government representatives, industry representatives, and environmental interest groups attended the meetings. Prior to the meetings, DHEC issued a press release regarding the development of an early action SIP. Correspondence including a fact sheet was sent to all county administrators, Councils of Governments, Metropolitan Planning Organizations, public interest groups, industry representatives, other state agencies and others determined to be stakeholders in the process.

The Parties to this EAC are: Saluda County, South Carolina Department of Health and Environmental Control (DHEC) and EPA.

**I. General Provisions**

- A. The parties commit to develop, implement and maintain the early action SIP (which includes the local early action plans) providing EPA defers the effective date of the non-attainment designation and related requirements as long as all conditions of the EAC and key milestones are met.
- B. If the potential area of non-attainment does not meet all the terms of the EAC, then it will forfeit its participation and will be subject to the full planning requirements under applicable CAA

traditional SIP processes including requirements defined as part of the EPA's 8-hour ozone implementation rulemaking.

- C. If the area has had the effective date of a non-attainment designation deferred and the area does not reach attainment of the standard by December 31, 2007, then the non-attainment designation will be effective. If the EPA's implementation schedule also requires a traditional SIP from areas on or before December 31, 2007, then a traditional SIP revision demonstrating attainment by the new attainment date will be due for the non-attainment area no later than December 31, 2008.
- D. Before formal adoption into the early action SIP, this agreement may be modified or terminated by mutual consent of all parties, or any party may withdraw from the agreement by notifying other parties in writing. If a party's withdrawal from the agreement prevents remaining signatories from satisfying any of the terms and milestones of the original agreement, the agreement will be void, any deferred effective date of the non-attainment designation would be withdrawn and the area's non-attainment designation would become effective soon after. Upon termination or withdrawal from the EAC, the area will be subject to the full planning requirements under applicable CAA traditional processes including requirements defined as part of the EPA's 8-hour ozone implementation rulemaking. The local government signatories will approve the local early action plans before submittal to DHEC for inclusion in the early action SIP. Once the local early action plan is incorporated into the early action SIP, any modifications will be treated as SIP revisions.
- E. Execution of this EAC by each Party shall be by signature of each Party's authorized representative. This agreement remains in effect until December 31, 2007.

## II. **Early Action Compact Requirements**

- A. **Milestones and Reporting**  
DHEC and local areas will assess progress towards developing and implementing the early action SIP and make a report available to EPA and the public every six months beginning in June 2003. As per EPA guidance, the key milestones for participation in the EAC are identified in the following table.

<b>Local Plan /Early Action SIP Milestones</b>		
<b>DATE</b>	<b>MILESTONE</b>	<b>RESPONSIBILITY</b>
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<b>June 16, 2003</b>	Discussion of control measures being considered to EPA	Local/State
<b>March 31, 2004</b>	Final local early action plan submitted to DHEC; copy to EPA	Local
<b>December 31, 2004</b>	Early Action State Implementation Plan submitted to EPA for incorporation into SIP	State
<b>April 1, 2005</b>	Local/State control strategies implemented no later than this date	Local/State
<b>September 30, 2005</b>	EPA takes final action on SIP submitted December 31, 2004	EPA
<b>June 30, 2006</b>	State submits progress report to EPA	State
<b>December 31, 2007</b>	Attainment of the 8-hour ozone standard	Local/State

B. Emissions Inventories

1. DHEC will be responsible for developing emissions inventories.
2. An initial modeling emissions inventory will be completed by December 31, 2002. This inventory includes:
  - a. Emissions modeling data for a 1998 episode that is representative of a typical ozone season exceedance that meets the EPA episode selection guidance;
  - b. MOBILE6 for determining on-road mobile emissions;
  - c. NONROAD model data; and,
  - d. Area source database utilizing population data allocated statewide.
3. A 2007 future year modeling emissions inventory will be developed by March 31, 2004. This inventory will sufficiently account for projected future growth in ozone precursor emissions through 2007, particularly from stationary, non-road and on-road mobile sources.
4. Additional inventories will be contingent upon legislative appropriations or other funding. Selection of specific episode inventories will be partially determined by the conceptual model, which reflects an analysis of meteorological conditions typical of high ozone events.
5. Emissions inventories will be compared and analyzed for trends in emission sources over time. The emissions inventory comparison and analysis will be completed by December 31, 2003.

C. Modeling

1. DHEC will be responsible for conducting the meteorological and air quality modeling analysis. DHEC will conduct the modeling analysis based on the "Draft Guidance on the use of Models and Other Analyses in Attainment Demonstrations for the 8-Hour Ozone NAAQS" (EPA-454/R-99-004, May 1999). The modeling will follow the guidance as facilitated by the EPA Regional Office.
2. Base case modeling will be completed by December 31, 2002. Future case modeling will be completed by October 31, 2003. One or more modeled control cases will be completed by January 31, 2004, with final revisions completed by March 31, 2004. All modeling will:
  - be SIP quality and perform within EPA's accepted margin of accuracy;
  - be carefully documented;
  - sufficiently account for projected future growth in ozone precursor emissions;
  - be accomplished by DHEC and reviewed by EPA; and,
  - be used to determine the effectiveness of NO<sub>x</sub> and/or VOC reductions. The control case(s) will be used to determine the relative effectiveness of different emission reduction strategies and to aid in the selection of appropriate emission reduction strategies.

D. Control Strategies

1. All adopted Federal and State control strategies that have been or will be implemented by the December 31, 2007, attainment date will be included in base, future and control case modeling.
2. Additional local and state control strategies under consideration will be identified by June 16, 2003. The local and state control strategies selected will be implemented as soon as practical, but no later than April 1, 2005.
3. Local and state control strategies will be specific, quantified, permanent and enforceable. The strategies will also include specific implementation dates and detailed documentation and reporting processes.
4. Voluntary strategies can play a supporting role in the local early action plan and the early action SIP. If emission reductions from voluntary strategies are quantified and credit is taken for them in the local early action plan or the early action SIP, those emission reductions will be enforceable. Additional strategies must be implemented to meet those quantified reduction requirements if quantified voluntary strategies fail. This is true for all quantified emission reductions.
5. Local and state control strategies will be designed and implemented with full stakeholder participation.

6. Local and state control strategies will be incorporated by DHEC into the early action SIP. In the event that the local area desires to add, delete or substitute strategies after early action SIP submittal, the local area will request a modification. Local early action plan modifications will be treated as SIP revisions and facilitated by DHEC.

E. Maintenance for Growth

1. The early action SIP will include a component to address emissions growth at least five years beyond December 31, 2007, ensuring that the areas will remain in attainment of the 8-hour ozone standard during that period. Attainment maintenance analysis will be completed by January 31, 2004, with final revisions completed by March 31, 2004. The analysis will employ one or more of the following or any other appropriate techniques necessary to make such a demonstration:
  - a. Modeling analysis showing ozone levels below the 8-hour ozone standard in 2012;
  - b. An annual review of growth (especially mobile and stationary source) to ensure control measures and growth assumptions are adequate;
  - c. Identification and quantification of federal, state, and/or local measures indicating sufficient reductions to offset growth estimates; or,
  - d. Any other appropriate techniques necessary to make such a determination.
2. The early action SIP must also detail a continuing planning process that includes modeling updates and modeling assumption verification (particularly growth assumptions). Modeling updates and planning processes must consider and evaluate the following:
  - a. All relevant actual new point sources;
  - b. Impacts from potential new source growth; and,
  - c. Future transportation patterns and their impact on air quality in a manner that is consistent with the most current adopted Long Range Transportation Plan and most current trend and projections of local motor vehicle emissions.
3. If the review of emissions growth in conjunction with the continuing planning process demonstrates that adopted emission reduction strategies are inadequate to address growth in emissions, additional measures will be added to the early action plan. Local planning processes should prepare for this possibility.
4. In the event that the continuing planning process identifies the need to add, delete, or substitute control strategies after the local early action plan has been incorporated into the early action SIP, the local area will initiate, and DHEC will facilitate a SIP revision to accommodate changes.

**F. Public Involvement**

1. Public involvement has been and will continue to be strongly encouraged during the planning and implementation process.
2. Public awareness programs will be used to provide opportunities for involvement in the planning process, implementation of control strategies, and any other issues important to the area.
3. Interested stakeholders (i.e., local, state, and federal government, citizens, public interest groups, and the business community) will continue to be involved in the planning process as early as possible. Planning meetings will be open to the public, with posted meeting times and locations. Early action SIP drafts will be publicly available, and the drafting process will have sufficient opportunities for comment from all interested stakeholders.
4. Opportunities for public comment on the proposed early action SIP will be provided and will follow the traditional SIP revision process as implemented by DHEC.
5. Semi-annual reports detailing, at a minimum, progress toward key milestones, will be made available to the public.
6. DHEC has established and will maintain a website for South Carolina's Early Action Plan for the 8-hour ozone standard, located at [www.scdhec.net/baq/eap.html](http://www.scdhec.net/baq/eap.html).

**III. Local Government Responsibilities**

The local governments agree to develop and implement a local early action plan that will promote the area's attainment by December 31, 2007, of the 8-hour ozone standard and maintenance until at least 2012. The local governments will develop this plan in coordination with the DHEC, EPA, stakeholders and the public. The local early action plan will include a process to evaluate the effectiveness and maintain long-term compliance with the standard.

After all adopted Federal and State controls that have been or will be implemented by the attainment date of December 31, 2007, are accounted for in the modeling, the local area must adopt additional local controls, as necessary to demonstrate attainment of the 8-hour ozone standard by December 31, 2007. Local controls under consideration must be identified and described by June 16, 2003. These measures must be included in the semi-annual report made available to the public.

The draft local early action plan will be submitted to DHEC by August 31, 2003. The final local early action plan will be submitted to DHEC, with a copy forwarded to EPA, by March 31, 2004. The adopted local early action plan will be included in the early action SIP due December 31, 2004.

In the event a development or issue arises that may impact performance or progress toward key milestones (including if a key milestone will be or has been missed and/or if a termination or modification has been requested), the responsible party will notify all other signatories in writing as soon as possible.

#### **IV. The South Carolina Department of Health and Environmental Control**

DHEC agrees to develop and implement a state early action SIP that will demonstrate the participating area's attainment by December 31, 2007, of the 8-hour ozone standard and maintenance until at least 2012. DHEC will develop this plan in coordination with the local governments, EPA, stakeholders and the public. The state early action SIP will include a process to monitor and maintain long-term compliance with the standard.

It is the responsibility of each state under the CAA to ensure attainment with all National Ambient Air Quality Standards. At any such time that an area is deemed non-attainment, the state will be required to develop a plan to return the area(s) to attainment in accordance with the CAA. If applicable, South Carolina is committed to working with adjacent states to assure mutual attainment of national standards.

In the event a development or issue arises that may impact performance or progress toward key milestones (including if a key milestone will be or has been missed and/or if a termination or modification has been requested), DHEC will notify all other signatories in writing as soon as possible.

DHEC will provide support to areas throughout the planning and implementation process by:

1. Developing emission inventories, modeling, trend analysis, and quantification and comparison of control measures.
2. Providing necessary information on all federal and state adopted emission reduction measures, which affect the area.
3. Providing technical and strategic assistance, as appropriate, in the selection and implementation of control strategies.
4. Providing technical and planning assistance in developing and implementing processes to address the impact of emissions growth beyond the attainment date.
5. Maintaining monitors and reporting and analysis of monitoring data.
6. Promoting public awareness efforts.
7. Coordinating communication between local areas and the EPA to facilitate continuing the EPA review of local work.
8. Ensuring expeditious review of local early action plan(s), and if deemed adequate, proposing modification of the early action SIP to adopt the early action plan.

9. Adopting control measures into the early action SIP as expeditiously as possible. The final complete early action SIP revision must be completed, adopted, and submitted by the state to the EPA by December 31, 2004.
10. Tracking progress. If any milestone is missed and EPA withdraws the deferred effective date, thereby triggering a non-attainment designation and applicable statutory requirements, the state will strive to submit a traditional non-attainment SIP within one year. However, due to the South Carolina legislative review process, it may take at least eighteen months.
11. Working concurrently with areas not electing to participate in the early action SIP process in preparing the traditional SIP submittal as required by the CAA.


## **V. The Environmental Protection Agency**

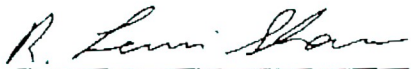
The EPA will participate by:

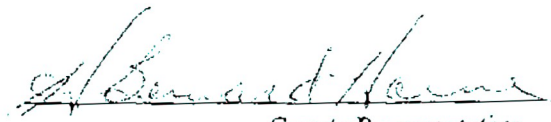
1. Recognizing the local area's and state's commitment to voluntarily adopt an early, substantive, enforceable, and scientifically-based attainment plan with early implementation of control measures by becoming a party to the EAC developed in conformance with South Carolina's Protocol for Early Action Compacts.
2. Providing technical assistance to the state(s) and local area(s) in the development of the early action plan.
3. Reviewing and approving the completed early action SIP by no later than September 30, 2005.
4. Deferring the effective date of non-attainment designation and related requirements for participating areas that fail to meet the 8-hour ozone standard as long as all terms and key milestones of the EAC are being met, including submission of the early action SIP revision by December 31, 2004.
5. Designating the area expeditiously as attainment and imposing no additional requirements, provided that the monitors in the area reflect attainment by December 31, 2007.
6. Taking action to withdraw the deferred effective date if the area violates the standard as of December 31, 2007, and the area has had the effective date of its non-attainment designation deferred. The area's non-attainment designation will become effective soon after.
7. Ensuring appropriate credit in the traditional SIP process for all emissions reductions from measures implemented in the early action SIP if the area does not meet all the terms of the EAC; including meeting agreed-upon key milestones and is designated (or re-designated if necessary) according to the EPA's 8-hour ozone implementation guidelines. The EPA will offer such an area no delays, exemptions, or other favorable treatment because of its participation in the EAC.

8. Not allowing any area to renew their EAC after December 31, 2007, or initiate a new compact if it has previously forfeited its participation.

VI. Signatures

  
United States Environmental Protection Agency      Regional Administrator      12-30-02  
Title      Date

  
South Carolina      Deputy Commissioner      12/20/02  
Department of Health and Environmental Control      Title      Date

  
H. Bernard Horne, County Representative      County Council Chairman      December 11, 2002

## **Waccamaw Area**

## **Local Early Action Compacts**

**December 2002**



**SOUTH CAROLINA'S 8-HOUR OZONE  
EARLY ACTION COMPACT  
Georgetown County**

The United States Environmental Protection Agency (EPA) has provided an option for areas currently meeting the 1-hour ozone standard, like those in South Carolina, to attain the 8-hour ozone standard by December 31, 2007, and obtain cleaner air sooner than federally mandated. This option offers a more expeditious time line for achieving emissions reductions than expected under the EPA's 8-hour ozone implementation rulemaking, while providing "fail-safe" provisions for the area to revert to the traditional State Implementation Plan (SIP) process if specific milestones are not met. Through the development of this Early Action Compact (EAC), local, state, and EPA officials agree to work together to develop and implement local and state early action plans. The plans will become a part of the state early action SIP to reduce ground-level ozone concentrations to comply with the 8-hour ozone standard by December 31, 2007, and maintain the standard beyond that date. Failure to meet the obligations outlined in this EAC will result in immediate reversion to the traditional non-attainment designation process as required in the Clean Air Act (CAA).

In an effort to provide this information to areas within South Carolina, the South Carolina Department of Health and Environmental Control (DHEC) held six public meetings throughout the state. The locations of the meetings were targeted to areas that could potentially be designated as non-attainment for the 8-hour ozone standard. The meetings were held in Columbia, Greenville, Florence, Rock Hill, Aiken and Charleston. EPA officials participated in five of the six meetings. The general public, local government representatives, industry representatives, and environmental interest groups attended the meetings. Prior to the meetings, DHEC issued a press release regarding the development of an early action SIP. Correspondence including a fact sheet was sent to all county administrators, Councils of Governments, Metropolitan Planning Organizations, public interest groups, industry representatives, other state agencies and others determined to be stakeholders in the process.

The Parties to this (EAC) are: Georgetown County, South Carolina Department of Health and Environmental Control (DHEC) and EPA.

**I. General Provisions**

- A. The parties commit to develop, implement and maintain the early action SIP (which includes the local early action plans) providing EPA defers the effective date of the non-attainment designation and related requirements as long as all conditions of the EAC and key milestones are met.
- B. If the potential area of non-attainment does not meet all the terms of the EAC, then it will forfeit its participation and will be subject to the full planning requirements under applicable CAA

traditional SIP processes including requirements defined as part of the EPA's 8-hour ozone implementation rulemaking.

- C. If the area has had the effective date of a non-attainment designation deferred and the area does not reach attainment of the standard by December 31, 2007, then the non-attainment designation will be effective. If the EPA's implementation schedule also requires a traditional SIP from areas on or before December 31, 2007, then a traditional SIP revision demonstrating attainment by the new attainment date will be due for the non-attainment area no later than December 31, 2008.
- D. Before formal adoption into the early action SIP, this agreement may be modified or terminated by mutual consent of all parties, or any party may withdraw from the agreement by notifying other parties in writing. If a party's withdrawal from the agreement prevents remaining signatories from satisfying any of the terms and milestones of the original agreement, the agreement will be void, any deferred effective date of the non-attainment designation would be withdrawn and the area's non-attainment designation would become effective soon after. Upon termination or withdrawal from the EAC, the area will be subject to the full planning requirements under applicable CAA traditional processes including requirements defined as part of the EPA's 8-hour ozone implementation rulemaking. The local government signatories will approve the local early action plans before submittal to DHEC for inclusion in the early action SIP. Once the local early action plan is incorporated into the early action SIP, any modifications will be treated as SIP revisions.
- E. Execution of this EAC by each Party shall be by signature of each Party's authorized representative. This agreement remains in effect until December 31, 2007.

## II. **Early Action Compact Requirements**

- A. **Milestones and Reporting**  
DHEC and local areas will assess progress towards developing and implementing the early action SIP and make a report available to EPA and the public every six months beginning in June 2003. As per EPA guidance, the key milestones for participation in the EAC are identified in the following table.

<b>Local Plan /Early Action SIP Milestones</b>		
<b>DATE</b>	<b>MILESTONE</b>	<b>RESPONSIBILITY</b>
<b>December 31, 2002</b>	EAC signed by all parties and submitted to EPA	Local/State/EPA
<b>June 16, 2003</b>	Discussion of control measures being considered to EPA	Local/State
<b>March 31, 2004</b>	Final local early action plan submitted to DHEC; copy to EPA	Local
<b>December 31, 2004</b>	Early Action State Implementation Plan submitted to EPA for incorporation into SIP	State
<b>April 1, 2005</b>	Local/State control strategies implemented no later than this date	Local/State
<b>September 30, 2005</b>	EPA takes final action on SIP submitted December 31, 2004	EPA
<b>June 30, 2006</b>	State submits progress report to EPA	State
<b>December 31, 2007</b>	Attainment of the 8-hour ozone standard	Local/State

B. Emissions Inventories

1. DHEC will be responsible for developing emissions inventories.
2. An initial modeling emissions inventory will be completed by December 31, 2002. This inventory includes:
  - a. Emissions modeling data for a 1998 episode that is representative of a typical ozone season exceedance that meets the EPA episode selection guidance;
  - b. MOBILE6 for determining on-road mobile emissions;
  - c. NONROAD model data; and,
  - d. Area source database utilizing population data allocated statewide.
3. A 2007 future year modeling emissions inventory will be developed by March 31, 2004. This inventory will sufficiently account for projected future growth in ozone precursor emissions through 2007, particularly from stationary, non-road and on-road mobile sources.
4. Additional inventories will be contingent upon legislative appropriations or other funding. Selection of specific episode inventories will be partially determined by the conceptual model, which reflects an analysis of meteorological conditions typical of high ozone events.
5. Emissions inventories will be compared and analyzed for trends in emission sources over time. The emissions inventory comparison and analysis will be completed by December 31, 2003.

C. Modeling

1. DHEC will be responsible for conducting the meteorological and air quality modeling analysis. DHEC will conduct the modeling analysis based on the "Draft Guidance on the use of Models and Other Analyses in Attainment Demonstrations for the 8-Hour Ozone NAAQS" (EPA-454/R-99-004, May 1999). The modeling will follow the guidance as facilitated by the EPA Regional Office.
2. Base case modeling will be completed by December 31, 2002. Future case modeling will be completed by October 31, 2003. One or more modeled control cases will be completed by January 31, 2004, with final revisions completed by March 31, 2004. All modeling will:
  - be SIP quality and perform within EPA's accepted margin of accuracy;
  - be carefully documented;
  - sufficiently account for projected future growth in ozone precursor emissions;
  - be accomplished by DHEC and reviewed by EPA; and,
  - be used to determine the effectiveness of NO<sub>x</sub> and/or VOC reductions. The control case(s) will be used to determine the relative effectiveness of different emission reduction strategies and to aid in the selection of appropriate emission reduction strategies.

D. Control Strategies

1. All adopted Federal and State control strategies that have been or will be implemented by the December 31, 2007, attainment date will be included in base, future and control case modeling.
2. Additional local and state control strategies under consideration will be identified by June 16, 2003. The local and state control strategies selected will be implemented as soon as practical, but no later than April 1, 2005.
3. Local and state control strategies will be specific, quantified, permanent and enforceable. The strategies will also include specific implementation dates and detailed documentation and reporting processes.
4. Voluntary strategies can play a supporting role in the local early action plan and the early action SIP. If emission reductions from voluntary strategies are quantified and credit is taken for them in the local early action plan or the early action SIP, those emission reductions will be enforceable. Additional strategies must be implemented to meet those quantified reduction requirements if quantified voluntary strategies fail. This is true for all quantified emission reductions.
5. Local and state control strategies will be designed and implemented with full stakeholder participation.

6. Local and state control strategies will be incorporated by DHEC into the early action SIP. In the event that the local area desires to add, delete or substitute strategies after early action SIP submittal, the local area will request a modification. Local early action plan modifications will be treated as SIP revisions and facilitated by DHEC.

E. Maintenance for Growth

1. The early action SIP will include a component to address emissions growth at least five years beyond December 31, 2007, ensuring that the areas will remain in attainment of the 8-hour ozone standard during that period. Attainment maintenance analysis will be completed by January 31, 2004, with final revisions completed by March 31, 2004. The analysis will employ one or more of the following or any other appropriate techniques necessary to make such a demonstration:
  - a. Modeling analysis showing ozone levels below the 8-hour ozone standard in 2012;
  - b. An annual review of growth (especially mobile and stationary source) to ensure control measures and growth assumptions are adequate;
  - c. Identification and quantification of federal, state, and/or local measures indicating sufficient reductions to offset growth estimates; or,
  - d. Any other appropriate techniques necessary to make such a determination.
2. The early action SIP must also detail a continuing planning process that includes modeling updates and modeling assumption verification (particularly growth assumptions). Modeling updates and planning processes must consider and evaluate the following:
  - a. All relevant actual new point sources;
  - b. Impacts from potential new source growth; and,
  - c. Future transportation patterns and their impact on air quality in a manner that is consistent with the most current adopted Long Range Transportation Plan and most current trend and projections of local motor vehicle emissions.
3. If the review of emissions growth in conjunction with the continuing planning process demonstrates that adopted emission reduction strategies are inadequate to address growth in emissions, additional measures will be added to the early action plan. Local planning processes should prepare for this possibility.
4. In the event that the continuing planning process identifies the need to add, delete, or substitute control strategies after the local early action plan has been incorporated into the early action SIP, the local area will initiate, and DHEC will facilitate a SIP revision to accommodate changes.

**F. Public Involvement**

1. Public involvement has been and will continue to be strongly encouraged during the planning and implementation process.
2. Public awareness programs will be used to provide opportunities for involvement in the planning process, implementation of control strategies, and any other issues important to the area.
3. Interested stakeholders (i.e., local, state, and federal government, citizens, public interest groups, and the business community) will continue to be involved in the planning process as early as possible. Planning meetings will be open to the public, with posted meeting times and locations. Early action SIP drafts will be publicly available, and the drafting process will have sufficient opportunities for comment from all interested stakeholders.
4. Opportunities for public comment on the proposed early action SIP will be provided and will follow the traditional SIP revision process as implemented by DHEC.
5. Semi-annual reports detailing, at a minimum, progress toward key milestones, will be made available to the public.
6. DHEC has established and will maintain a website for South Carolina's Early Action Plan for the 8-hour ozone standard, located at [www.scdhec.net/baq/eap.html](http://www.scdhec.net/baq/eap.html).

**III. Local Government Responsibilities**

The local governments agree to develop and implement a local early action plan that will promote the area's attainment by December 31, 2007, of the 8-hour ozone standard and maintenance until at least 2012. The local governments will develop this plan in coordination with the DHEC, EPA, stakeholders and the public. The local early action plan will include a process to evaluate the effectiveness and maintain long-term compliance with the standard.

After all adopted Federal and State controls that have been or will be implemented by the attainment date of December 31, 2007, are accounted for in the modeling, the local area must adopt additional local controls, as necessary to demonstrate attainment of the 8-hour ozone standard by December 31, 2007. Local controls under consideration must be identified and described by June 16, 2003. These measures must be included in the semi-annual report made available to the public.

The draft local early action plan will be submitted to DHEC by August 31, 2003. The final local early action plan will be submitted to DHEC, with a copy forwarded to EPA, by March 31, 2004. The adopted local early action plan will be included in the early action SIP due December 31, 2004.

In the event a development or issue arises that may impact performance or progress toward key milestones (including if a key milestone will be or has been missed and/or if a termination or modification has been requested), the responsible party will notify all other signatories in writing as soon as possible.

#### **IV. The South Carolina Department of Health and Environmental Control**

DHEC agrees to develop and implement a state early action SIP that will demonstrate the participating area's attainment by December 31, 2007, of the 8-hour ozone standard and maintenance until at least 2012. DHEC will develop this plan in coordination with the local governments, EPA, stakeholders and the public. The state early action SIP will include a process to monitor and maintain long-term compliance with the standard.

It is the responsibility of each state under the CAA to ensure attainment with all National Ambient Air Quality Standards. At any such time that an area is deemed non-attainment, the state will be required to develop a plan to return the area(s) to attainment in accordance with the CAA. If applicable, South Carolina is committed to working with adjacent states to assure mutual attainment of national standards.

In the event a development or issue arises that may impact performance or progress toward key milestones (including if a key milestone will be or has been missed and/or if a termination or modification has been requested), DHEC will notify all other signatories in writing as soon as possible.

DHEC will provide support to areas throughout the planning and implementation process by:

1. Developing emission inventories, modeling, trend analysis, and quantification and comparison of control measures.
2. Providing necessary information on all federal and state adopted emission reduction measures, which affect the area.
3. Providing technical and strategic assistance, as appropriate, in the selection and implementation of control strategies.
4. Providing technical and planning assistance in developing and implementing processes to address the impact of emissions growth beyond the attainment date.
5. Maintaining monitors and reporting and analysis of monitoring data.
6. Promoting public awareness efforts.
7. Coordinating communication between local areas and the EPA to facilitate continuing the EPA review of local work.
8. Ensuring expeditious review of local early action plan(s), and if deemed adequate, proposing modification of the early action SIP to adopt the early action plan.

9. Adopting control measures into the early action SIP as expeditiously as possible. The final complete early action SIP revision must be completed, adopted, and submitted by the state to the EPA by December 31, 2004.
10. Tracking progress. If any milestone is missed and EPA withdraws the deferred effective date, thereby triggering a non-attainment designation and applicable statutory requirements, the state will strive to submit a traditional non-attainment SIP within one year. However, due to the South Carolina legislative review process, it may take at least eighteen months.
11. Working concurrently with areas not electing to participate in the early action SIP process in preparing the traditional SIP submittal as required by the CAA.

## **V. The Environmental Protection Agency**

The EPA will participate by:

1. Recognizing the local area's and state's commitment to voluntarily adopt an early, substantive, enforceable, and scientifically-based attainment plan with early implementation of control measures by becoming a party to the EAC developed in conformance with South Carolina's Protocol for Early Action Compacts.
2. Providing technical assistance to the state(s) and local area(s) in the development of the early action plan.
3. Reviewing and approving the completed early action SIP by no later than September 30, 2005.
4. Deferring the effective date of non-attainment designation and related requirements for participating areas that fail to meet the 8-hour ozone standard as long as all terms and key milestones of the EAC are being met, including submission of the early action SIP revision by December 31, 2004.
5. Designating the area expeditiously as attainment and imposing no additional requirements, provided that the monitors in the area reflect attainment by December 31, 2007.
6. Taking action to withdraw the deferred effective date if the area violates the standard as of December 31, 2007, and the area has had the effective date of its non-attainment designation deferred. The area's non-attainment designation will become effective soon after.
7. Ensuring appropriate credit in the traditional SIP process for all emissions reductions from measures implemented in the early action SIP if the area does not meet all the terms of the EAC; including meeting agreed-upon key milestones and is designated (or re-designated if necessary) according to the EPA's 8-hour ozone implementation guidelines. The EPA will offer such an area no delays, exemptions, or other favorable treatment because of its participation in the EAC.

8. Not allowing any area to renew their EAC after December 31, 2007, or initiate a new compact if it has previously forfeited its participation.


VI. Signatures

  
United States Environmental Protection Agency

Regional Administrator 12-30-02  
Title Date

R. Lenn Shaw  
South Carolina  
Department of Health and Environmental Control

Deputy Commissioner 12/27/02  
Title Date

  
Georgetown County Representative

City of St. Johns 12/23/02  
Title Date

**SOUTH CAROLINA'S 8-HOUR OZONE  
EARLY ACTION COMPACT  
Horry County**

The United States Environmental Protection Agency (EPA) has provided an option for areas currently meeting the 1-hour ozone standard, like those in South Carolina, to attain the 8-hour ozone standard by December 31, 2007, and obtain cleaner air sooner than federally mandated. This option offers a more expeditious time line for achieving emissions reductions than expected under the EPA's 8-hour ozone implementation rulemaking, while providing "fail-safe" provisions for the area to revert to the traditional State Implementation Plan (SIP) process if specific milestones are not met. Through the development of this Early Action Compact (EAC), local, state, and EPA officials agree to work together to develop and implement local and state early action plans. The plans will become a part of the state early action SIP to reduce ground-level ozone concentrations to comply with the 8-hour ozone standard by December 31, 2007, and maintain the standard beyond that date. Failure to meet the obligations outlined in this EAC will result in immediate reversion to the traditional non-attainment designation process as required in the Clean Air Act (CAA).

In an effort to provide this information to areas within South Carolina, the South Carolina Department of Health and Environmental Control (DHEC) held six public meetings throughout the state. The locations of the meetings were targeted to areas that could potentially be designated as non-attainment for the 8-hour ozone standard. The meetings were held in Columbia, Greenville, Florence, Rock Hill, Aiken and Charleston. EPA officials participated in five of the six meetings. The general public, local government representatives, industry representatives, and environmental interest groups attended the meetings. Prior to the meetings, DHEC issued a press release regarding the development of an early action SIP. Correspondence including a fact sheet was sent to all county administrators, Councils of Governments, Metropolitan Planning Organizations, public interest groups, industry representatives, other state agencies and others determined to be stakeholders in the process.

The Parties to this (EAC) are: Horry County, South Carolina Department of Health and Environmental Control (DHEC) and EPA.

**I. General Provisions**

- A. The parties commit to develop, implement and maintain the early action SIP (which includes the local early action plans) providing EPA defers the effective date of the non-attainment designation and related requirements as long as all conditions of the EAC and key milestones are met.
- B. If the potential area of non-attainment does not meet all the terms of the EAC, then it will forfeit its participation and will be subject to the full planning requirements under applicable CAA

traditional SIP processes including requirements defined as part of the EPA's 8-hour ozone implementation rulemaking.

- C. If the area has had the effective date of a non-attainment designation deferred and the area does not reach attainment of the standard by December 31, 2007, then the non-attainment designation will be effective. If the EPA's implementation schedule also requires a traditional SIP from areas on or before December 31, 2007, then a traditional SIP revision demonstrating attainment by the new attainment date will be due for the non-attainment area no later than December 31, 2008.
- D. Before formal adoption into the early action SIP, this agreement may be modified or terminated by mutual consent of all parties, or any party may withdraw from the agreement by notifying other parties in writing. If a party's withdrawal from the agreement prevents remaining signatories from satisfying any of the terms and milestones of the original agreement, the agreement will be void, any deferred effective date of the non-attainment designation would be withdrawn and the area's non-attainment designation would become effective soon after. Upon termination or withdrawal from the EAC, the area will be subject to the full planning requirements under applicable CAA traditional processes including requirements defined as part of the EPA's 8-hour ozone implementation rulemaking. The local government signatories will approve the local early action plans before submittal to DHEC for inclusion in the early action SIP. Once the local early action plan is incorporated into the early action SIP, any modifications will be treated as SIP revisions.
- E. Execution of this EAC by each Party shall be by signature of each Party's authorized representative. This agreement remains in effect until December 31, 2007.

## **II. Early Action Compact Requirements**

- A. **Milestones and Reporting**  
DHEC and local areas will assess progress towards developing and implementing the early action SIP and make a report available to EPA and the public every six months beginning in June 2003. As per EPA guidance, the key milestones for participation in the EAC are identified in the following table.

<b>Local Plan /Early Action SIP Milestones</b>		
<b>DATE</b>	<b>MILESTONE</b>	<b>RESPONSIBILITY</b>
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<b>June 16, 2003</b>	Discussion of control measures being considered to EPA	Local/State
<b>March 31, 2004</b>	Final local early action plan submitted to DHEC; copy to EPA	Local
<b>December 31, 2004</b>	Early Action State Implementation Plan submitted to EPA for incorporation into SIP	State
<b>April 1, 2005</b>	Local/State control strategies implemented no later than this date	Local/State
<b>September 30, 2005</b>	EPA takes final action on SIP submitted December 31, 2004	EPA
<b>June 30, 2006</b>	State submits progress report to EPA	State
<b>December 31, 2007</b>	Attainment of the 8-hour ozone standard	Local/State

B. Emissions Inventories

1. DHEC will be responsible for developing emissions inventories.
2. An initial modeling emissions inventory will be completed by December 31, 2002. This inventory includes:
  - a. Emissions modeling data for a 1998 episode that is representative of a typical ozone season exceedance that meets the EPA episode selection guidance;
  - b. MOBILE6 for determining on-road mobile emissions;
  - c. NONROAD model data; and,
  - d. Area source database utilizing population data allocated statewide.
3. A 2007 future year modeling emissions inventory will be developed by March 31, 2004. This inventory will sufficiently account for projected future growth in ozone precursor emissions through 2007, particularly from stationary, non-road and on-road mobile sources.
4. Additional inventories will be contingent upon legislative appropriations or other funding. Selection of specific episode inventories will be partially determined by the conceptual model, which reflects an analysis of meteorological conditions typical of high ozone events.
5. Emissions inventories will be compared and analyzed for trends in emission sources over time. The emissions inventory comparison and analysis will be completed by December 31, 2003.

C. Modeling

1. DHEC will be responsible for conducting the meteorological and air quality modeling analysis. DHEC will conduct the modeling analysis based on the "Draft Guidance on the use of Models and Other Analyses in Attainment Demonstrations for the 8-Hour Ozone NAAQS" (EPA-454/R-99-004, May 1999). The modeling will follow the guidance as facilitated by the EPA Regional Office.
2. Base case modeling will be completed by December 31, 2002. Future case modeling will be completed by October 31, 2003. One or more modeled control cases will be completed by January 31, 2004, with final revisions completed by March 31, 2004. All modeling will:
  - be SIP quality and perform within EPA's accepted margin of accuracy;
  - be carefully documented;
  - sufficiently account for projected future growth in ozone precursor emissions;
  - be accomplished by DHEC and reviewed by EPA; and,
  - be used to determine the effectiveness of NO<sub>x</sub> and/or VOC reductions. The control case(s) will be used to determine the relative effectiveness of different emission reduction strategies and to aid in the selection of appropriate emission reduction strategies.

D. Control Strategies

1. All adopted Federal and State control strategies that have been or will be implemented by the December 31, 2007, attainment date will be included in base, future and control case modeling.
2. Additional local and state control strategies under consideration will be identified by June 16, 2003. The local and state control strategies selected will be implemented as soon as practical, but no later than April 1, 2005.
3. Local and state control strategies will be specific, quantified, permanent and enforceable. The strategies will also include specific implementation dates and detailed documentation and reporting processes.
4. Voluntary strategies can play a supporting role in the local early action plan and the early action SIP. If emission reductions from voluntary strategies are quantified and credit is taken for them in the local early action plan or the early action SIP, those emission reductions will be enforceable. Additional strategies must be implemented to meet those quantified reduction requirements if quantified voluntary strategies fail. This is true for all quantified emission reductions.
5. Local and state control strategies will be designed and implemented with full stakeholder participation.

6. Local and state control strategies will be incorporated by DHEC into the early action SIP. In the event that the local area desires to add, delete or substitute strategies after early action SIP submittal, the local area will request a modification. Local early action plan modifications will be treated as SIP revisions and facilitated by DHEC.

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  - b. An annual review of growth (especially mobile and stationary source) to ensure control measures and growth assumptions are adequate;
  - c. Identification and quantification of federal, state, and/or local measures indicating sufficient reductions to offset growth estimates; or,
  - d. Any other appropriate techniques necessary to make such a determination.
2. The early action SIP must also detail a continuing planning process that includes modeling updates and modeling assumption verification (particularly growth assumptions). Modeling updates and planning processes must consider and evaluate the following:
  - a. All relevant actual new point sources;
  - b. Impacts from potential new source growth; and,
  - c. Future transportation patterns and their impact on air quality in a manner that is consistent with the most current adopted Long Range Transportation Plan and most current trend and projections of local motor vehicle emissions.
3. If the review of emissions growth in conjunction with the continuing planning process demonstrates that adopted emission reduction strategies are inadequate to address growth in emissions, additional measures will be added to the early action plan. Local planning processes should prepare for this possibility.
4. In the event that the continuing planning process identifies the need to add, delete, or substitute control strategies after the local early action plan has been incorporated into the early action SIP, the local area will initiate, and DHEC will facilitate a SIP revision to accommodate changes.

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1. Public involvement has been and will continue to be strongly encouraged during the planning and implementation process.
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3. Interested stakeholders (i.e., local, state, and federal government, citizens, public interest groups, and the business community) will continue to be involved in the planning process as early as possible. Planning meetings will be open to the public, with posted meeting times and locations. Early action SIP drafts will be publicly available, and the drafting process will have sufficient opportunities for comment from all interested stakeholders.
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6. DHEC has established and will maintain a website for South Carolina's Early Action Plan for the 8-hour ozone standard, located at [www.scdhec.net/baq/eap.html](http://www.scdhec.net/baq/eap.html).

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The local governments agree to develop and implement a local early action plan that will promote the area's attainment by December 31, 2007, of the 8-hour ozone standard and maintenance until at least 2012. The local governments will develop this plan in coordination with the DHEC, EPA, stakeholders and the public. The local early action plan will include a process to evaluate the effectiveness and maintain long-term compliance with the standard.

After all adopted Federal and State controls that have been or will be implemented by the attainment date of December 31, 2007, are accounted for in the modeling, the local area must adopt additional local controls, as necessary to demonstrate attainment of the 8-hour ozone standard by December 31, 2007. Local controls under consideration must be identified and described by June 16, 2003. These measures must be included in the semi-annual report made available to the public.

The draft local early action plan will be submitted to DHEC by August 31, 2003. The final local early action plan will be submitted to DHEC, with a copy forwarded to EPA, by March 31, 2004. The adopted local early action plan will be included in the early action SIP due December 31, 2004.

In the event a development or issue arises that may impact performance or progress toward key milestones (including if a key milestone will be or has been missed and/or if a termination or modification has been requested), the responsible party will notify all other signatories in writing as soon as possible.

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DHEC agrees to develop and implement a state early action SIP that will demonstrate the participating area's attainment by December 31, 2007, of the 8-hour ozone standard and maintenance until at least 2012. DHEC will develop this plan in coordination with the local governments, EPA, stakeholders and the public. The state early action SIP will include a process to monitor and maintain long-term compliance with the standard.

It is the responsibility of each state under the CAA to ensure attainment with all National Ambient Air Quality Standards. At any such time that an area is deemed non-attainment, the state will be required to develop a plan to return the area(s) to attainment in accordance with the CAA. If applicable, South Carolina is committed to working with adjacent states to assure mutual attainment of national standards.

In the event a development or issue arises that may impact performance or progress toward key milestones (including if a key milestone will be or has been missed and/or if a termination or modification has been requested), DHEC will notify all other signatories in writing as soon as possible.

DHEC will provide support to areas throughout the planning and implementation process by:

1. Developing emission inventories, modeling, trend analysis, and quantification and comparison of control measures.
2. Providing necessary information on all federal and state adopted emission reduction measures, which affect the area.
3. Providing technical and strategic assistance, as appropriate, in the selection and implementation of control strategies.
4. Providing technical and planning assistance in developing and implementing processes to address the impact of emissions growth beyond the attainment date.
5. Maintaining monitors and reporting and analysis of monitoring data.
6. Promoting public awareness efforts.
7. Coordinating communication between local areas and the EPA to facilitate continuing the EPA review of local work.
8. Ensuring expeditious review of local early action plan(s), and if deemed adequate, proposing modification of the early action SIP to adopt the early action plan.

9. Adopting control measures into the early action SIP as expeditiously as possible. The final complete early action SIP revision must be completed, adopted, and submitted by the state to the EPA by December 31, 2004.
10. Tracking progress. If any milestone is missed and EPA withdraws the deferred effective date, thereby triggering a non-attainment designation and applicable statutory requirements, the state will strive to submit a traditional non-attainment SIP within one year. However, due to the South Carolina legislative review process, it may take at least eighteen months.
11. Working concurrently with areas not electing to participate in the early action SIP process in preparing the traditional SIP submittal as required by the CAA.

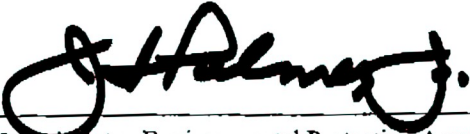
## **V. The Environmental Protection Agency**

The EPA will participate by:

1. Recognizing the local area's and state's commitment to voluntarily adopt an early, substantive, enforceable, and scientifically-based attainment plan with early implementation of control measures by becoming a party to the EAC developed in conformance with South Carolina's Protocol for Early Action Compacts.
2. Providing technical assistance to the state(s) and local area(s) in the development of the early action plan.
3. Reviewing and approving the completed early action SIP by no later than September 30, 2005.
4. Deferring the effective date of non-attainment designation and related requirements for participating areas that fail to meet the 8-hour ozone standard as long as all terms and key milestones of the EAC are being met, including submission of the early action SIP revision by December 31, 2004.
5. Designating the area expeditiously as attainment and imposing no additional requirements, provided that the monitors in the area reflect attainment by December 31, 2007.
6. Taking action to withdraw the deferred effective date if the area violates the standard as of December 31, 2007, and the area has had the effective date of its non-attainment designation deferred. The area's non-attainment designation will become effective soon after.
7. Ensuring appropriate credit in the traditional SIP process for all emissions reductions from measures implemented in the early action SIP if the area does not meet all the terms of the EAC; including meeting agreed-upon key milestones and is designated (or re-designated if necessary) according to the EPA's 8-hour ozone implementation guidelines. The EPA will offer such an area no delays, exemptions, or other favorable treatment because of its participation in the EAC.

8. Not allowing any area to renew their EAC after December 31, 2007, or initiate a new compact if it has previously forfeited its participation.

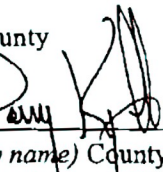
VI. Signatures

  
United States Environmental Protection Agency

Regional Administrator 12-30-02  
Title Date

R. Linn Shan  
South Carolina  
Department of Health and Environmental Control

Deputy Commissioner 12/27/02  
Title Date

Horry County  
  
(insert county name) County Representative

Administrator

Administrator 12-23-02  
Horry Co.  
Title Date

**SOUTH CAROLINA'S 8-HOUR OZONE  
EARLY ACTION COMPACT**  
Williamsburg County

The United States Environmental Protection Agency (EPA) has provided an option for areas currently meeting the 1-hour ozone standard, like those in South Carolina, to attain the 8-hour ozone standard by December 31, 2007, and obtain cleaner air sooner than federally mandated. This option offers a more expeditious time line for achieving emissions reductions than expected under the EPA's 8-hour ozone implementation rulemaking, while providing "fail-safe" provisions for the area to revert to the traditional State Implementation Plan (SIP) process if specific milestones are not met. Through the development of this Early Action Compact (EAC), local, state, and EPA officials agree to work together to develop and implement local and state early action plans. The plans will become a part of the state early action SIP to reduce ground-level ozone concentrations to comply with the 8-hour ozone standard by December 31, 2007, and maintain the standard beyond that date. Failure to meet the obligations outlined in this EAC will result in immediate reversion to the traditional non-attainment designation process as required in the Clean Air Act (CAA).

In an effort to provide this information to areas within South Carolina, the South Carolina Department of Health and Environmental Control (DHEC) held six public meetings throughout the state. The locations of the meetings were targeted to areas that could potentially be designated as non-attainment for the 8-hour ozone standard. The meetings were held in Columbia, Greenville, Florence, Rock Hill, Aiken and Charleston. EPA officials participated in five of the six meetings. The general public, local government representatives, industry representatives, and environmental interest groups attended the meetings. Prior to the meetings, DHEC issued a press release regarding the development of an early action SIP. Correspondence including a fact sheet was sent to all county administrators, Councils of Governments, Metropolitan Planning Organizations, public interest groups, industry representatives, other state agencies and others determined to be stakeholders in the process.

The Parties to this EAC are: Williamsburg County, South Carolina Department of Health and Environmental Control (DHEC) and EPA.

**I. General Provisions**

- A. The parties commit to develop, implement and maintain the early action SIP (which includes the local early action plans) providing EPA defers the effective date of the non-attainment designation and related requirements as long as all conditions of the EAC and key milestones are met.
- B. If the potential area of non-attainment does not meet all the terms of the EAC, then it will forfeit its participation and will be subject to the full planning requirements under applicable CAA

traditional SIP processes including requirements defined as part of the EPA's 8-hour ozone implementation rulemaking.

- C. If the area has had the effective date of a non-attainment designation deferred and the area does not reach attainment of the standard by December 31, 2007, then the non-attainment designation will be effective. If the EPA's implementation schedule also requires a traditional SIP from areas on or before December 31, 2007, then a traditional SIP revision demonstrating attainment by the new attainment date will be due for the non-attainment area no later than December 31, 2008.
- D. Before formal adoption into the early action SIP, this agreement may be modified or terminated by mutual consent of all parties, or any party may withdraw from the agreement by notifying other parties in writing. If a party's withdrawal from the agreement prevents remaining signatories from satisfying any of the terms and milestones of the original agreement, the agreement will be void, any deferred effective date of the non-attainment designation would be withdrawn and the area's non-attainment designation would become effective soon after. Upon termination or withdrawal from the EAC, the area will be subject to the full planning requirements under applicable CAA traditional processes including requirements defined as part of the EPA's 8-hour ozone implementation rulemaking. The local government signatories will approve the local early action plans before submittal to DHEC for inclusion in the early action SIP. Once the local early action plan is incorporated into the early action SIP, any modifications will be treated as SIP revisions.
- E. Execution of this EAC by each Party shall be by signature of each Party's authorized representative. This agreement remains in effect until December 31, 2007.

## **II. Early Action Compact Requirements**

- A. **Milestones and Reporting**  
DHEC and local areas will assess progress towards developing and implementing the early action SIP and make a report available to EPA and the public every six months beginning in June 2003. As per EPA guidance, the key milestones for participation in the EAC are identified in the following table.

<b>Local Plan /Early Action SIP Milestones</b>		
<b>DATE</b>	<b>MILESTONE</b>	<b>RESPONSIBILITY</b>
<b>December 31, 2002</b>	EAC signed by all parties and submitted to EPA	Local/State/EPA
<b>June 16, 2003</b>	Discussion of control measures being considered to EPA	Local/State
<b>March 31, 2004</b>	Final local early action plan submitted to DHEC; copy to EPA	Local
<b>December 31, 2004</b>	Early Action State Implementation Plan submitted to EPA for incorporation into SIP	State
<b>April 1, 2005</b>	Local/State control strategies implemented no later than this date	Local/State
<b>September 30, 2005</b>	EPA takes final action on SIP submitted December 31, 2004	EPA
<b>June 30, 2006</b>	State submits progress report to EPA	State
<b>December 31, 2007</b>	Attainment of the 8-hour ozone standard	Local/State

B. Emissions Inventories

1. DHEC will be responsible for developing emissions inventories.
2. An initial modeling emissions inventory will be completed by December 31, 2002. This inventory includes:
  - a. Emissions modeling data for a 1998 episode that is representative of a typical ozone season exceedance that meets the EPA episode selection guidance;
  - b. MOBILE6 for determining on-road mobile emissions;
  - c. NONROAD model data; and,
  - d. Area source database utilizing population data allocated statewide.
3. A 2007 future year modeling emissions inventory will be developed by March 31, 2004. This inventory will sufficiently account for projected future growth in ozone precursor emissions through 2007, particularly from stationary, non-road and on-road mobile sources.
4. Additional inventories will be contingent upon legislative appropriations or other funding. Selection of specific episode inventories will be partially determined by the conceptual model, which reflects an analysis of meteorological conditions typical of high ozone events.
5. Emissions inventories will be compared and analyzed for trends in emission sources over time. The emissions inventory comparison and analysis will be completed by December 31, 2003.

C. Modeling

1. DHEC will be responsible for conducting the meteorological and air quality modeling analysis. DHEC will conduct the modeling analysis based on the "Draft Guidance on the use of Models and Other Analyses in Attainment Demonstrations for the 8-Hour Ozone NAAQS" (EPA-454/R-99-004, May 1999). The modeling will follow the guidance as facilitated by the EPA Regional Office.
2. Base case modeling will be completed by December 31, 2002. Future case modeling will be completed by October 31, 2003. One or more modeled control cases will be completed by January 31, 2004, with final revisions completed by March 31, 2004. All modeling will:
  - be SIP quality and perform within EPA's accepted margin of accuracy;
  - be carefully documented;
  - sufficiently account for projected future growth in ozone precursor emissions;
  - be accomplished by DHEC and reviewed by EPA; and,
  - be used to determine the effectiveness of NO<sub>x</sub> and/or VOC reductions. The control case(s) will be used to determine the relative effectiveness of different emission reduction strategies and to aid in the selection of appropriate emission reduction strategies.

D. Control Strategies

1. All adopted Federal and State control strategies that have been or will be implemented by the December 31, 2007, attainment date will be included in base, future and control case modeling.
2. Additional local and state control strategies under consideration will be identified by June 16, 2003. The local and state control strategies selected will be implemented as soon as practical, but no later than April 1, 2005.
3. Local and state control strategies will be specific, quantified, permanent and enforceable. The strategies will also include specific implementation dates and detailed documentation and reporting processes.
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United States Environmental Protection Agency

Regional Administrator 12-30-02  
Title Date

R. Linn Shaw  
South Carolina  
Department of Health and Environmental Control

Deputy Commissioner 12/20/02  
Title Date

  
Williamsburg County Representative

SUPERVISOR DEC 20, 02  
Title Date